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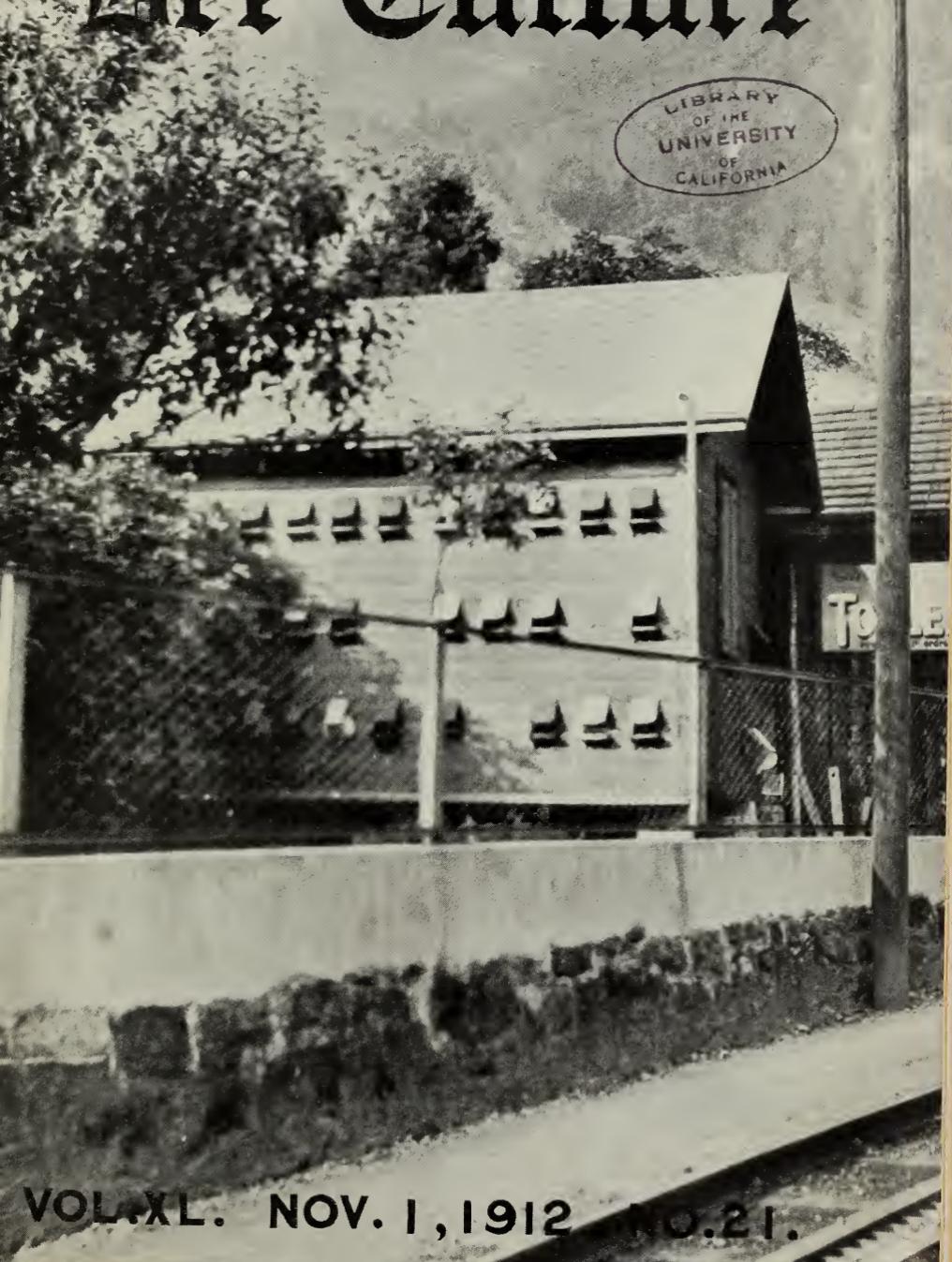
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Gleanings in Tree Culture

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VOL.XL. NOV. 1, 1912

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HONEY LABELS

There is nothing that adds more to the attractiveness of a honey package than a neat label carefully worded and of the proper style. The guarantee of purity by the producer put on every package he offers for sale is the best protection he can get from the stories of adulteration that injure the sale of his product.

For glass packages a small label is generally preferred, while for tin, one that laps around the package is considered best. We supply both gummed and ungummed labels. We recommend the ungummed, however, for they adhere more readily when pasted on a package, and are not affected by changes in the atmosphere as are the gummed.

We give on the opposite page a few illustrations of some of our stock patterns. These are printed, some of them in two or more colors, some in bronze on glazed paper, and some in black on glazed paper. To get a very adequate idea of these you ought to see samples printed on regular label stock in the proper colors. We have a catalog which shows just what we can furnish in this line, and we shall be glad to send it on request.

Just now we can give very prompt attention to orders for this label work. We can furnish special labels too if you tell us what you want. Of course the price is higher than for our regular patterns; but if you are buying them in very large quantities you may want something to suit your individual tastes. Let us do your label work for you, for we can guarantee satisfaction.

The A. I. Root Co., Medina, O.

Gleanings in Bee Culture

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VOL. XL

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Editorial

THE COVER PICTURE.

The scene on the cover for this issue represents a house-apriary at Vitznau, Switzerland, a little village on Lake Lucerne, at the base of the Rigi Mountain. The track in the foreground is the cog railroad leading up the side of the Rigi, the mist-shrouded heights of which appear in the background.

In Europe house-apriaries are much more common than in this country, where they are more the exception than the rule. The alighting-boards for each colony are painted different colors so that the bees, and especially the young queens, may not so easily mistake other entrances for their own.

MAKE SURE OF THE WINTER STORES.

We have just been favored by a call from S. D. House, Camillus, N. Y., and P. G. Clark, who has been a partner of G. M. Doolittle for many years. Mr. House, as our readers know, is one of the most expert comb-honey producers in the whole country, and Mr. Clark is in the queen-rearing business with Mr. Doolittle.

Both of these beekeepers, Mr. House in particular, have noticed the lack of stores in the hives at this time of the year compared to other years, and they are fearful that the smaller beekeepers will lose a large proportion of their bees this coming winter from starvation. The trouble is that many will be deceived by looking down into the hive between the top-bars, and jump to the conclusion that there are plenty of stores because they can see sealed honey in the upper part of every comb, when in many cases there is but half an inch or so of honey, which will last the bees but a short time at the best.

Mr. House has been feeding 10 to 25 pounds of syrup per colony, in spite of the fact that there were acres of goldenrod in reach of his bees. Ordinarily, in the fall he is able to take off a super of honey gathered from fall sources and still leave the brood-chamber with ample stores for

winter; but this year he has had to do extensive feeding for the first time. The wet and cold weather prevails in many parts of the North, so that the bees could not get out to work on the fall flowers. The strictest attention should be paid, therefore, to the question of stores, for it is needless to say that no amount of packing for shelter will winter the colony without sufficient stores of good quality.

DEATH OF JOHN S. HARBISON, PIONEER BEEKEEPER OF CALIFORNIA.

JUST as we go to press a postal card bearing the following comes to hand:

John S. Harbison, one who brought bees from Pennsylvania across the Isthmus of Panama in 1857, died in San Diego, Cal., Oct. 12, aged 86 years and 15 days. He was an honest man and a good citizen.

San Marcos, Cal., Oct. 15. G. F. MERRIAM.

While we feel sad that another veteran has gone, we can rejoice that he was permitted to live to a good old age. And, by the way, is it not true that our veteran beekeepers, especially the old standbys, the most of them, live to a good old age? I want to suggest to our good friend Dr. Miller that he take care of himself, and take particular pains to live as long as possible. And I would say the same to some others who are still "holding the fort."

Some years after Mr. Harbison took the lot of bees to California I grouped together the photographs of a good many of the prominent beemen of the world. In the very center I made a circle for the picture of Mr. Harbison; and I did every thing I could do to induce him to give me a photograph of himself; but I did not succeed, and so the picture card was sent out with Harbison's place left blank.

On my first visit to California I tried to get acquainted with him; but he was very busy, and at that time I was comparatively little known to the bee-world, and so I did not get very much in touch with him. In 1903, however, when we had a big convention in Los Angeles, he was very glad in-

deed to see me. He took me all over the country, showed me his out-apiaries, etc.

Now, I can serve our readers better by making a quotation from GLEANINGS for Oct. 1, 1903, in regard to the convention:

In taking up the part assigned me, "Reminiscences of Forty Years," I touched on the introduction of bee culture in California; and it was a happy surprise to see J. S. Harbison one of the foremost in the audience—that is, he sat near the speaker, very likely because, like myself, he is a little hard of hearing in his old age. As I finished I made a request that Bro. Harbison tell us something about the introduction of bees into California. If I am correct, this is almost the first time, if not the *very* first, that Mr. Harbison has attended a beekeepers' convention; and I am quite sure it is the first time he has given a full history of his remarkable venture. At first he seemed inclined to make only a few brief remarks; but in response to my repeated questioning he gave a very full and clear account of it. When he was quite a young man residing in Pennsylvania he got a notion in his head, so his neighbors said, that bees would pay well in California. He wrote there to find out about it, and was told there was nothing there for bees to live on; that if he brought them he would have to plant crops to grow honey before he could make them succeed. He could not give it up, however, and in due time he had two carloads of bees fixed to the best of his knowledge and skill for their long trip. Right and left he received nothing but criticisms and sneers. Just one man, if I remember, gave him a little encouragement by telling him to be of good cheer, for he believed that a great future was before him. He succeeded so well that only about a dozen colonies perished on the way, and then came his great triumph. It was during the gold excitement and high prices that his bees were landed; and they went off so fast at \$100 a colony that many were disappointed, and commenced bidding to the first purchasers. In this way a few colonies were sold at over \$200 each. In a little time Mr. Harbison shipped samples of his mountain-sage honey in 2-lb. sections to the principal cities of the United States. It was a novelty; and, it being war time, when things were high, his whole crop was sold at 25 cts. per lb. wholesale.

Side by side with Bro. Harbison, on the front seat, was J. G. Corey, of cold-blast-smoker fame. Bro. Corey got the bee fever; but he lived away off over the mountains, and the only way to get bees over there was to carry them on foot. He succeeded in purchasing a weak colony. As he was already something of a beekeeper he made a light hive to contain his nucleus, and strapped it across his shoulders. This hive he carried successfully more than 100 miles over the mountains. Part of the trip he had to make on snowshoes; but he got them through alive, built them up, divided, and sold his increase for something like \$40 or \$50 a colony.

Mr. Harbison was whole-souled. He not only accumulated quite a property with bees and other things, but he made good use of his means, and was foremost in all public enterprises. Above all, he was honest and upright in all his dealings. Those who ridiculed and made sport of his undertaking away back in the 50's are dead and forgotten; but the memory of Mr. Harbison's achievements will live and bless the world for years to come. May God be praised for the great and good men as well as women who have given our industry a lift and impetus in years gone by.

QUESTIONS ON WINTERING.

YEAR in and year out we are fairly bombarded with questions from beginners.

There seems to be no let-up, for there are always more beginners who are eager to learn. We are glad in all cases to answer these questions; but it is our purpose at this time to cover the ground somewhat as we have before, in order that many of our readers who, perhaps, do not realize that they are making mistakes, may be warned in time. We shall give the questions almost word for word as we receive them.

I have a room in my barn where I can easily put my ten colonies of bees during the cold winter weather. It seems to me they would be better off there than out of doors.

In a closed room above the ground, bees do not winter well, as a rule, if they are confined. It seems to be contrary to the nature of bees to be confined in a room, the temperature of which is varying from below freezing to 40° or 50, or even 60 degrees Fahrenheit. There are exceptions, of course. For instance, one beekeeper last fall asked our advice as to whether he should place his bees in an unused room in his house. We advised against the plan unless he could locate them close to the windows so they could have an entrance outdoors at all times. Before he received our letter, however, he had gone ahead and placed the hives, of which there were three or four, in this unused room, and he decided to leave them there, as they seemed to be so quiet. Last spring he wrote us that they wintered well. We should say that they wintered *in spite* of being placed in this room, and we feel sure that they would have been better off in a cellar or well packed out of doors.

There are several inches of honey in the upper part of the central combs in one of my hives, and rather more in the outside combs. Is this enough?

It all depends upon the size of the colony, and also as to how much you mean by "several inches" and "rather more." A medium-strong colony should have not less than 30 pounds of sealed stores. But you probably do not know how much comb space this amount would take. A comb of Langstroth size, which is the size of the regular Hoffman frame, if full of honey will weigh anywhere from seven to ten pounds. You can tell something from this about how much comb area should be filled. If a colony is being wintered on eight combs we should say that there should be three or four inches of honey in the upper part of the four central combs, four to five inches in the next comb on each side, and five to six inches in the outside comb on each side.

My bees have enough to last them through the coldest part of the weather, and then I expect to feed again in the spring. How shall I make the syrup for spring feeding?

It depends on circumstances again; but

equal parts of sugar and water will not be far out of the way, although two parts of water to one of sugar would be better.

We feel sure your colonies would be in far better condition if your hives contained all the stores they needed until the new honey comes in next season. If you have a reserve set of combs of sealed stores, it is all right to use them where they are needed in the spring; but spring feeding of syrup, especially by an amateur, is liable to make trouble. The bees get excited and are likely to start robbing. Most of the best producers have decided that their colonies, taking every thing into consideration, are in the very best possible condition for the next honey-flow if the combs contain sufficient stores in the fall, so that the bees in the spring need not feel that they must economize.

I live just ten miles north of the Ohio River, and my colonies are in single-walled hives. Will it be necessary for me to pack them out of doors, or winter them in a cellar?

We would not advise cellar wintering in your locality, for you have a good many warm days, especially in an open winter, when the bees can fly; and on these days bees in a cellar are likely to become restless, for it is hard to keep the cellar temperature from rising too much.

As to whether you will need to pack them out of doors, this will depend on the winter. Last winter colonies in single-walled hives even quite a distance south of the Ohio River suffered, and many, of course, died outright. In general, we may say that strong colonies in single-walled hives south of the Ohio River do not need very much extra packing, provided a sheltered location can be secured. By a "sheltered location" we mean one protected from the prevailing cold winds in the winter. If these winds come from the west, a location on the eastern slope of a hill is usually quite sheltered, or on the east side of a woods. A high board fence is a great help; but for best results it should entirely surround the apiary, as a fence merely on the west side sometimes causes counter-currents that really do as much damage as the unbroken wind.

For those who are undecided as to what to do in regard to packing, we may say that, during a cold snap, when the temperature goes lower than usual, colonies may be picked up temporarily and placed in the cellar. This applies also to localities further north, even to colonies in double-walled hives in case they stand in an exposed location. As has been mentioned so often, bees will stand a great amount of cold if protected from the wind. The

temperature may be quite low in a sheltered location without serious damage.

Three of my colonies are queenless. Will they live until spring?

Probably not. If you have any other colonies in your yard that are weak, but that are accompanied by a fair queen, unite the queenless colonies with them. As late as this it usually does not pay to buy queens, even if you can get them; for there is more difficulty in getting them introduced; and if the venture is unsuccessful the queen is lost and the bees too. It is better to unite them than to run the risk of buying a new queen.

The time to requeen is in the latter part of August or the first of September. The young newly introduced queens, especially if the colonies are fed to stimulate brood-rearing, will get a fine lot of brood started, which will result in strong vigorous young bees by the time the cold weather comes on, and there is little danger then that the queens will be missing during the winter or spring, just when they are needed the most. If all beekeepers would look carefully to this matter of queens in the late summer or early fall there would not be the great rush for queens in May and early June as there always is—at a time, too, when queens are much more expensive than they are later in the season.

I have one colony—a late swarm—that covers only four combs. Is it too weak to winter, or shall I unite it with another colony?

If it covered four combs on a cold day it may be strong enough to winter; but on a warm day the cluster should expand to six or seven combs. It depends on the temperature when you make the examination.

Right in this connection we should like to say a word regarding some beekeepers who seem to have phenomenal success in wintering. Some, even in cold climates, winter year after year with scarcely the loss of a colony; and others in a similar location, or in one that is even better adapted for wintering, perhaps, lose a large proportion. This loss may be explained in some cases by poor winter stores; for instance, aster honey, in localities where there are few flight days, is sometimes unsuitable. But we are inclined to believe that the difference is more often because of a difference in the strength of the colonies. Good strong colonies of vigorous stock made up largely of young bees, with plenty of good stores, will winter in spite of almost every thing, and the hives will be fairly boiling over with bees in the spring. Such colonies do not have to be fussed with and nursed in order to be in good condition for the honey-flow, and spring dwindling is unknown.

Stray Straws

DR. C. C. MILLER, Marengo, Ill.

RICHARDSON's hive-stands, p. 664, look good. Bottom-boards will not rot as they will on wood, and hives will not tumble off as they will on stakes.

THE *British Bee Journal*, p. 307, says, "The average profit per hive from properly managed British bees is 20s." That's about \$5.00—better than we can do on this side.

E. S. HUDSON gets comb honey built between brood-combs, p. 638. That's all right if the brood-combs are new; but next to old black combs I've had honey sealed very dark.

C. M. HICKS, you say, p. 635, that beeway sections without separators are harder to handle than plain ones. Please play fair. Were the plain sections also without separators or fences?

LOUIS SCHOLL, you say, p. 652, that you advertise "as exclusive comb-honey producers" when you sell honey that is one-third extracted. What would you advertise if you produced no extracted?

P. C. CHADWICK, p. 616, even if bees do prefer small entrances, does that prove that small entrances are best for you? Do they not swarm more with small entrances? [Small entrances in summer don't work well here.—Ed.]

YOUR SURMISE, Mr. Editor, p. 646, is that the queen, when crowded, drops eggs promiscuously, and the workers put them in the cells. My guess is that the queen herself lays in cells already occupied. I wish we could know for certain.

C. H. HARLAN, radiator-pipes make your cellar too warm for the bees, p. 638. Ever try wrapping two or three thicknesses of asbestos paper around the pipes? [Such protection will answer on *furnace* pipes, but not on steam or hot-water pipes.—Ed.]

MENTION is made in the last Straw, p. 649, of a "package of bees without brood or bees." If that is the work of "the intelligent compositor" he should be discharged instanter. If it was in the manuscript—well—er—any one is liable to make mistakes.

J. WARREN ARTHUR, you like side starters in sections better than full sheets of foundation, p. 638. But don't the bees build drone comb in your sections? And doesn't that injure the looks of the sections? And, unless you use excluders, don't queens lay in that drone comb?

LEWIS P. TANTON's story, page 581, sets one to thinking. In some cases such as he mentions, the disappointing delay is worse than if the amount of money involved had been stolen outright. If it's right to give the name of a common thief, why isn't it right to give the name of one who is worse than a common thief?

A FRENCH physician, Dr. Carton, has written a brochure in which he denounces as the three most deadly aliments, alcohol, meat, and sugar.—*L'Apiculture*, 272. And I suppose eating sugar does more harm in this country than in France, since more sugar is eaten here. [The world is full of extremists, and Dr. Carton appears to be no exception. We never knew of a husband and father who, after buying meat or sugar, abused his family or deprived them of support.—Ed.]

G. M. DOOLITTLE, you say, page 508, "There is no prettier sight than a super of sections all alike in advancement, with not a cell yet sealed." Isn't that same superful prettier after the sections are all sealed snowy white? Yet I'm like you; that super of unsealed sections, every section just alike, thrills me with delight as does no lot of finished sections. I suppose it's because of the evidence of the strong force of bees at work, and the flood of honey that a good God is giving us.

SOME THINGS P. C. Chadwick says, p. 651, suggest that bee-inspectors might be worth their keep if for nothing else than to spread information among beekeepers that will hardly be reached in any other way—I mean aside from foul brood. [It is certainly true that bee inspectors do a great deal of good aside from the service they render in the elimination of bee disease. Many do not read any books or papers, and yet they are always glad to get advice by word of mouth. The helpful advice given by the bee inspectors is worth all it costs to send them around, even if no service were rendered in combating bee disease.—Ed.]

H. H. Root, you say, p. 90, that "bees do scarcely any work in a comb-honey super three stories high." I wonder if that means just what it says. At this present moment half my colonies with section-supers are working in supers three or more stories high, and they were higher a week or two ago. [In this particular I was taking Mr. Anthony's statement, and possibly I put the matter a little too strong.

But I should like to know just how many comb-honey producers stack up their supers three high. If the season were not exceptionally good it would seem as though there would be danger of too many unfinished sections.—H. H. R.]

"WE INTEND to preach the doctrine of producing more comb," etc., p. 610. I've an idea that a strong factor in the preponderance of extracted over comb was your preaching "more extracted." Look out now that your preaching doesn't get too much comb on the market. I'm leaning just a little to the opinion that it would be for the general good if only extracted were produced. [Where did we continue to preach more extracted, as we are now advocating more comb-honey production? —Ed.]

MR. EDITOR, can you tell us whether sections will ship as safely in safety shipping-cases without carriers as they will in regular shipping-cases with carriers? If so, then the safeties are the cheaper. Let's figure. Suppose we have standard sections and buy cases by the hundred.

Eight 24-lb. regulars will cost \$1.44
Carrier for same..... .60

Total..... .2.04

Eight 24-lb. safeties will cost.. 2.00
--

A saving of half a cent on each case by buying the safeties. Suppose we use 12-lb. cases.

Twelve 12-lb. regulars will cost.. \$1.38

Carrier for same..... .60

Total..... .1.98

Twelve 12-lb. safeties will cost.. 1.80

A saving of 1½ cents on each case by buying the safeties. And that counts nothing for the labor of putting together the carriers. On the other hand, it must take a good deal of time to put the sections in the cartons of the safeties. With the carriers you must always ship a multiple of 8 or 12 cases. With the safeties you can ship any number you like. I think I would rather handle single cases at a time than to handle the carriers. One man or boy can handle the single cases, and there must be two men to handle the carriers. But the question still remains: Are the safeties as safe without carriers as the regulars with carriers? [No comparative tests of the two kinds of cases in the manner stated have been made; but we would recommend both safety cases and carriers combined. While the safeties compared to the old-style cases are unquestionably superior to the old-style cases when neither is in carriers, yet we believe it is very wise to give comb honey all the protection it can reasonably have. Of one

thing we are sure—that, unless the old-style cases are discontinued, the comb-honey business is doomed; for commission men and buyers will not longer tolerate the breakages of the combs, the consequent leakage, and the difficulty of making settlement satisfactory to either party.—Ed.]

J. F. CRANE, p. 577, just to please you and J. L. Byer (and myself) I'm going to say "grade" instead of "hybrid" hereafter. [Apparently the term "hybrid" has been undergoing a change, or else the term is broader than it is usually given credit for being. The latest edition of Webster's New International Dictionary gives it the following definition: "The offspring of a male of one race, *variety*, species, or genus, with the female of another" (italics ours); "a cross-bred animal or plant . . . Those between distinct species are distinguished by some as *true hybrids*. . . . By many plant and animal breeds *hybrid* is now limited to a cross between different species, cross-breed being used for a cross between races or varieties of the same species." Now the last sentence above quoted narrows down the term; but nevertheless, according to the dictionary it is perfectly correct to speak of a hybrid as a cross between varieties. The Century Dictionary and Encyclopedia have the following: "The offspring or progeny of animals or plants of different varieties, species, or genera; a half-breed or cross-breed . . . The *commonest* are those resulting from the union of opposite sexes of *varieties* of the same species. . . . Hybrids or half-breeds of the human race are among the best known examples." The italics in the foregoing are ours.

It will be seen from the above that the two dictionaries very closely agree in sanctioning the broader use of the term. Therefore it does not seem to us that "hybrids," denoting a cross between Italians and black bees, for instance, is incorrectly used. It is possible that the word has degenerated; but if so, beekeepers are not the only ones who have had a hand in thus changing the meaning. Moreover, assuming for the moment that the narrower meaning is the correct one, the mere fact that beekeepers dropped the term "hybrid" would have no effect on the use of the word in general.

In GLEANINGS and in the ABC and XYZ of Bee Culture we stand as opposed to changing aparian terms which have been long in use, unless such terms are clearly misleading. For example, we favored dropping the term "black brood," owing to the fact that the diseased brood in this case is not necessarily black.—Ed.]

Notes from Canada

J. L. BYER, Mt. Joy, Ont.

Speaking of queen bees, may I be allowed to forecast that, in the near future, there will be some radical changes made in the methods of raising them? Lately we hear much about rearing from eggs instead of transferring the larvæ, and I believe this is one step toward the change that is apt to take place. Anyway, I am very firmly convinced, after an exhaustive test, that queens reared by transferring the larvæ do not live nearly as long as do those reared under the swarming impulse. I base my belief on a large number of cases taken collectively, not on individual cases, which prove nothing one way or the other.

* * *

Relative to the new postal ruling of the United States regarding the mailing of queens, in our humble opinion the Department is to be congratulated on making an effort to prevent the dissemination of disease in mailing-cages, and I wish that our Canadian Postal Department would make a similar ruling. At the last Ontario convention held in Toronto, November last, this matter was spoken of when the committee was considering what recommendations to make to the Federal Parliament regarding necessary legislation for the bee industry. While the most of the members of the committee, including myself, were not in favor of doing any thing to hamper the free introduction of queens into Canada from the United States, owing to the fact that the demand for queens is greater than Canadian breeders can supply, yet I venture to say that every member of that committee will be glad that the ruling referred to has been made. While the chances of introducing disease in mailing-cages may not be very great, yet that there is a chance no one will dispute; and then, again, there is no question but that some queen-breeders have been unjustly accused in the past. If they take all precautions against the chance of disease being carried in their cages, there will be no chance of an unjust accusation being made against the queen-breeder.

* * *

From the fact that some queen-breeders have made a success of using a candy with no honey in it, it does look indeed possible in the near future for *all* of them to be on the safe side regarding any accusation of spreading foul brood through the country in their mailing-cages. While not in the business, most assuredly I would try the plan if needing any candy for fitting up

mailing-cages for queens. In England it is quite a common thing for many colonies to be wintered exclusively on candy instead of honey stores; and in this country it has been tried to a limited extent as well. Only a few days ago, while talking with Mr. F. L. Pollock, of Stouffville, Ont., he told me that last winter he tried the plan with the best of success, and that he considered it more economical than feeding sugar syrup, and not nearly so much bother. This winter I believe he intends to try the plan on a more extensive scale, and results will be awaited with interest. I believe he follows the plan for making the candy as outlined in GLEANINGS. I said *he*, but really it should be *she*, as Mrs. Pollock does the work of making the candy just as I expect another woman would be asked to do the work if I needed some candy made. It's a sure guess that I would burn it if I tried to make it myself.

* * *

ITALIANS CAME OUT AHEAD IN THE RACE.

In Eastern Ontario the majority of the bees have been of the old-time black or German variety; and while my limited experience in that locality as an inspector convinced me that those bees in their purity are much more quiet than many of the hybrids kept further west, yet I knew nothing positive as to their honey-gathering qualities as compared with the Italians or Carniolans. In the spring of 1911 I bought a large apiary out there, and in the fall about a third were Italianized. This season (a poor one in that section) the 80 Italians stored more than double as much as the 160 blacks in the same apiary, all receiving the same attention. At the last convention of the Ontario Association, some men from the East strongly championed the blacks; and I have been seriously wondering lately whether they have ever given the other races a trial. At any rate, if all that east yard of mine had been requeened a year ago it would have meant more dollars for us this year; and when a man tells me after this that the blacks are as good as Italians or Carniolans I will just think he is joking. At any rate, European foul brood is causing a good many to change stocks, for while Italians and Carniolans are not *immune* to the disease they stand up against it much better than the blacks. In fact, experience has shown that there is no use trying to cure the latter race if they once get infected.

Beekeeping Among the Rockies

WESLEY FOSTER, Boulder, Colo.

Economy in beekeeping is a rare thing to find. We lose here in the West by not making use of the wax, and also the honey suitable for vinegar. Some of us are buying covers and bottom-boards that could be made as well, and for half the cost, at the home planing-mill. I would not advocate any thing but a dovetailed hive body for the West; but it is a fact that many beemen are obtaining very satisfactory service from home-made fixtures. The making at home of super bodies, and purchasing only the inside furniture, means a saving of money for many where freight rates are excessive. The manufacture of brood foundation from home-rendered wax is successfully done by an increasing number of apiarists during the winter months. Surplus foundation, as yet, seems to be beyond the ability of the average beeman.

I have galvanized-iron covers that are the equal of factory-made covers costing 50 cents each, that cost me 22 cents—11 cents for the galvanized iron cut and crimped, and 11 cents for the wood sawed and ready to be nailed together. However, it is not advisable to go into home-hive construction until the comparative costs have been ascertained. I would not attempt, located as I am, to make my own frames, section-holders, separators, hive bodies, nor shipping cases. Some may be located where it is necessary to make these things or have them made in their home town.

* * *

BAITS AND BULK COMB HONEY IN COLORADO.

In talking with Mr. A. S. Parsons, of Rocky Ford, the other day, he told me that the complaints of the buyers of bulk comb honey might be partly attributable to the fact that in selling the honey the chunks (should I say bulks, Mr. Scholl?) were taken out and sold, without a sufficient amount of extracted taken out with each sale. The combs keep rising to the top; and when the honey is two-thirds gone from the package, there is nothing left but extracted honey, which makes the dealer come to the conclusion that he has been cheated.

The beemen at Rocky Ford sell all of their bait combs that contain sufficient honey as bulk comb honey, breaking the combs from the sections and packing them in large-mouth sixty-pound cans. Extracted honey, warmed just enough so that it will not melt the combs, is poured over them until the can is filled. A sixty-pound can will hold about 58 pounds net, and they bring from \$5.50 to \$6.50 a can. There

seems to be a good demand for all of this kind of honey the producers have; but of course the amount they have is limited. Kansas takes the most of it, the local market taking none whatever, or practically none.

* * *

GO WEST, YOUNG MAN, GO WEST.

S. King Clover writes that one should think twice before leaving cozy homes in the East, where society is established on a more or less firm basis, for the undeveloped regions of the West. This is sound wisdom; and one who has a well-established business in the East would be foolish to pull up and move into a country where conditions of life are so different. But the West still holds opportunities for the young man whose habits of life have not been firmly formed, and who can adapt his practice to new conditions such as the West presents. This is a young man's country, and the obstacles to be overcome are no more difficult than the pioneers of the middle West had to conquer. The young man who can enter a new country, clear the sage brush, dig ditches, build roads, and put irrigating water on his land, is building a rugged worthy character at the same time. He will outdistance the young man who inherits an improved farm in the East, for which his father had to work and struggle. Because the West is hard to win to civilization and tillage is why the people here think so well of their country. It is said in Oregon that, the further West one goes, the more the people boost their country. I thought that Colorado people boosted things to the limit. What we need is more builders and fewer boosters. The booster is the speculator who buys land at \$10.00 and sells it for \$50.00 or \$100.00, while the builder is the one who puts in a crop of potatoes and sells \$100.00 worth to the acre or better.

There are still opportunities in the West for beekeepers; and one contemplating moving would do well to take an extended trip, looking up a desirable location. Places can be found where crops of honey will be good, and where it will be a long time before there will be any danger of overstocking. The part of the West with which I am familiar is distinctive in two ways—the delightful climate and the progressive mental atmosphere that conquer obstacles. The West needs young men, and many of them. Riches may not be found, but a worthy life may be led in the fertile valleys of the Rocky Mountain region.

Beekeeping in California

P. C. CHADWICK, Redlands, Cal.

Letters of inquiry regarding the State Association should not be sent to me. Write direct to Sec'y A. B. Shaffner, 4232 West First St., Los Angeles, Cal.; and while you are writing you should send in \$1.50 dues for a year, and get the crop reports next season. They will be worth many times more than the price of your dues.

* * *

October started in with good general rains, the value of which will depend on how soon others follow to sustain the vegetation that has started. Fillaree is coming up nicely, and if occasional rains continue, our early aid to spring breeding would be assured. Personally I have no misgiving in this matter, and am willing to go on record as believing we are to have plenty of rain, a warm winter, and a honey crop.

* * *

I have been harping about extracted honey since I began the editing of this department, and have run the department with my own ideas and policies. My views have been the opposite of the editor's in this respect, because of an honest difference of opinion. But the price of the best grade of comb honey this season in Los Angeles has averaged ten cents a pound higher than the best grade of extracted. Here we have a difference in price that surely must look good to beekeepers who are figuring on how they can get the most from their bees. A beekeeper told me a few years ago that he put just as little into his bees and got just as much out as possible. That kind of beekeeper has, to be sure, no business working for comb honey; but the majority are of this class, and find it easier to turn an extractor than to scrape and pack sections. It begins to look to me very much as though there were going to be some good money in comb honey for those who are willing, and fitted in knowledge and patience to give it the proper attention. The past season, one of the most successful beekeepers, to my knowledge, produced largely comb honey, using extracting combs for the lighter flows. His best grade sold for 18 cts. per lb., while the best extracted brought only 7 or 8 cts. Such a difference will make comb-honey worth while.

* * *

I mentioned, Oct. 15, something about California beekeepers being a demoralized set so far as being organized or alive to their interests is concerned. I am going to continue on this subject for two reasons.

First, I want to say there are very few industries in the State, of as much im-

portance as the bee industry, that are not better organized. The orange, raisin, and celery growers and other producers have their organizations through which they work in unison, and trust those in charge of the organization. I believe the success of many of these organizations is due to the fact that they have many men in them who are not strictly of the granger class. We beekeepers, to a very great extent, are purely of granger tendencies, and inherit a suspicious, distrustful, independent nature that is hard to overcome. We are not to be blamed in the least for this attitude, for we have long been the prey of buyers and commission men, and our misgivings are well founded; but this is more reason why we should be in a mutual organization composed only of producers, for then we should be able to help protect ourselves. A great many look upon organization as did the Jew who was going to Europe with his son. When in mid-ocean their ship sprang a leak and was slowly sinking. The son, learning of the danger, rushed to his father, exclaiming, "Father, the ship is sinking." The father answered, coolly, "Vel, vot of it? It don't belong to us."

This illustrates my point—that it is hard to get beekeepers to realize that their industry is sinking. It may not belong to them, yet they may go down with the rest. I am becoming more of an enthusiast over organization every day; but I believe it will be necessary to educate to some extent before we can succeed in getting a great many to take hold. But this is being done, especially the last few months, during which time the State has aided our association in holding meetings at various points which I have previously mentioned.

Second, the average beekeeper is not posted on markets or prices, and many in the more remote districts sell their honey to the first buyer who comes along, at whatever price is offered. Naturally he feels that it is *his* business, and it undoubtedly is; but in many cases honey prices are from one-half to two cents more per pound than the grower gets, and, in consequence, he takes from 60 cts. to \$2.40 per case less than he should. As soon as we are able to get our membership up to a point where we can furnish cans and cases at a reduction to our members, then they will begin to come in out of the hills to join our association.

Five cents saved per case looks larger to many beekeepers than one-half cent more per pound in the price of their honey.

Conversations with Doolittle

At Borodino, New York

DISPOSING OF A HONEY CROP; THE COMMISSION MERCHANT NOT TO BE DESPISED.

"I want you to tell something about disposing of a crop of comb honey to the best advantage."

"The first thing is, to put it up nicely for market, so that it will attract the eye of every person who happens to see it. Years ago I used furniture tacks, with large shining metal heads, using one over the head of every nail that was in sight on each case containing the honey. Then I used a dark wood, a sort of yellow brown, with lighter shades all through, showing the 'grain' of each year's growth. The name of this wood is sumac. This was for the side cleats, which held the sections in the cases, these cleats being only 3-16 inch thick, 1½ inches wide, which allowed two-thirds of the 'face side' of the sections to show their nice white faces to the public. To say that I enjoyed getting out the sumac poles, which grew on father's land, sawing, planing, and preparing them in my own shop on winter days, hardly explains the fun I had in fixing up these fancy cases. Cases thus fixed up, filled with the neatest snow-white combs of basswood honey, were admired by hundreds at my home. I sold much of it at home, and what was not so disposed of I sold with the remainder of my crop to a dealer in Syracuse. A case of this was set outside his store near the walk, and he told me that almost everyone who passed by was sure to stop and look at it, making many exclamations regarding its beauty, and then would come in to purchase some.

"But having the crop all put up nicely, what next? No matter how good one may feel over a crop of the most attractive honey, he must have no thought of holding this crop permanently. One can not live on honey alone, and he must exchange this beautiful crop, in which he has taken so much delight, for money to buy the things another has produced.

"I remember, as yesterday, when my father, more than half a century ago, exchanged all the box honey he could produce (and he had nearly three-fourths of a ton one year) for boots, shoes, stockings, clothing, furniture, etc., doing this to as good advantage as would be the case if we received 40 cents a pound to-day.

"The disposing of one's crop of honey seems to be the one thing which puzzles the beekeeper—not that it is difficult to

sell it, but to sell it advantageously; that is where the trouble comes in. Beekeeping is an *industrial* pursuit, while the disposing of the product is purely commercial. Few men are born equipped for a commercial life; and where they are, if they should start out with an industrial pursuit they would soon work out of this into the commercial, where they rightfully belong. Not one man in five thousand is equally fitted for both the industrial and the commercial. I know that farmers sell their own products quite generally; but their hogs, sheep, cattle, butter, cabbage, grain, etc., are things which are *sought* after by dealers in every city and at every railroad station throughout the country. But it seems to be different with honey, especially in this day and age of the world. Fifty years ago, occasionally a dealer would go through these parts buying up what honey he could; but this method now would be a surprise. Honey does not seek its level in the markets as do flour, meat, sugar, etc., and it does not have a standard quotation as do these things. It is not uncommon to find the price quoted in one market from twenty to thirty per cent higher than in another city, when it would seem by the scarcity of nectar-secreting flowers that the latter should be the one that would pay the higher per cent.

"In view of these disadvantages which the apiarist labors under, and after trying most of the many plans given for the disposing of a good crop of honey, after it is nicely put up, I have come to regard the commission merchant as the best friend of the one who does not care to try his hand in a commercial way. By devoting oneself to the specialty of beekeeping, the bees may be made to give greater crops, and thus one may, to a certain extent, save the commission charged for the selling of his product. There are many commission merchants who are as upright as they of our own household; and by using the proper care one can find such as are proved to be reliable by a reputation founded on a long-established business. Having found the righteous man (Dun's or Bradstreet's commercial reports will help in this matter), then one should get his product into their hands so they can have sufficient time to take advantage of the market in selling it. I find that the best time to have it reach these merchants is from September 20 to October 15, in order to give them a chance to obtain the best price."

General Correspondence

MOVING 30 COLONIES OF BEES 40 MILES

Some Predicaments Resulting from Inexperience

BY "SUBSCRIBER."

For several years Bert Harper and I kept bees in a little town where we attended high school. As I lived at one end of the town and he at the other, neither of us feared overstocking the location, for our combined apiaries did not amount to over seventy colonies. During the school year we were busy with our studies; but our spare hours we freely gave to the bees. This was only fair play, for they were very busy for us. But when we came to the end of the senior year we had to part company, and this is the reason for the story.

That spring Bert's father sold his farm and moved away to another, which was some forty miles distant. The purchaser of the old farm gave consent to Bert to leave his thirty colonies of bees on the place till the end of the school year in June, when he planned to move them to their new quarters. About the end of July, Bert paid me an unexpected visit, and asked if I would help him move the bees the next day, in case he had every thing ready beforehand. I told him I would do it if he couldn't get any one else, but that it would be a dangerous job; for if I knew anything about bees, they were a bad cargo. It would be hard to close the hives bee-tight, and yet give sufficient ventilation. The least error would mean escaping bees, stung horses, a possible runaway, a smash-up, and broken necks. When he heard all this he insisted on my helping him, for everybody else was afraid to venture. So, not to go back on old friendship. I promised to be ready the next day.

Late the next afternoon, as the shadows began to steal across the fields, and the sun was putting himself to bed, we started to nail up the hives and fit them for the long journey. Some of them were shaky, and the work consumed time. By eight o'clock this part of the work was done, and the next thing was to load up. Bert had an idea that this could be done in a few minutes, but he was sadly mistaken. The hives gave us no end of trouble. Nothing seemed to fit on the rigging of the wagon. The main trouble was that, besides the thirty hives, Bert was taking what was about a wagonload besides, comprising canned fruit, house-plants, empty hives, and a lot else. It was well on to

eleven when we got the load in shape and tied the last rope.

"You're sure it's safe, are you?" inquired Bert, looking carefully at the high-piled load.

"Safe!" said I; "of course it isn't very safe; but it's the best anybody can make it."

Then we started the horses and the trip began. When we hit the main road, affairs moved more smoothly and rapidly. It was now close to midnight, the road was very dark, and in some places more narrow than we liked. Our lantern, too, was a bother, for it would flutter every little while and go out, and it took about ten minutes every time to get it going again. Still, we were quite happy, for the worst seemed over. The world was still, and all we could hear was the steady hum of the bees and the straining and banging of the great wagon.

After about half an hour we came to Rock Gorge. We got down the one side safely, and the ascent commenced on the other side. All went well till we were almost at the summit, when one of the hives fell off with a bang in the road behind. I yelled to Bert to drive right on to the top, while I saved what was left of the hive. It was a sorry mess; but I fixed it up the best I could, and off we went after a delay of half an hour.

"Bert," said I, "you will have to drive some if you get there; it's almost twelve now, and we have come only a few miles."

"It can't be helped. We ought to have loaded up better," was Bert's somewhat tart response.

We had not covered many miles before I became curious about a hive on the edge of the load; and as I leaned back to make it fast I lost my balance and went head first into the road, taking the hive with me. For an instant I was dazed as much as the bees may have been; but in due time we all responded to the call of duty. I got the hive back on the load, picked up the lantern, climbed up on the rig, and once more we started on our way.

After a while we saw the lights of Williamsburg shining through the night, and we rejoiced that our first twelve miles would soon be passed. We wished we were on the other side, for the hill leading down to the village is steep in places, and right at the foot of the steepest place there is a railway track.

The hill and the railroad together made a bad combination on a dark night. We had just come to this place, when all at

once there was a sharp crack, and the horses snorted and jumped in alarm. I called to Bert, "Into the ditch! quick! The chain is broken. Get into the ditch or the load is lost!"

Bert managed to make the ditch, and the load was saved for the present. Bert climbed down, discouraged.

"This is a fine fix," said he. "The chain is broken, and not a soul around here that I know. I wish I had never started."

I was not feeling so bad, and hunted up some fence wire with which we fixed up the chain, and on we went with renewed courage. Our course led straight through the town; and once when we were well through it, we took the State Road direct for the upper country, and toward Galen Hill. The load seemed to be charmed—every thing was going nicely, and the horses stepped along as they had not done at all before. As we reached the foot of the rise the sun was just peeping up above the eastern hills. We thought a rest would be a good thing, and so we halted and inspected the load. It was a sorry sight. It looked just as if some one had taken a stick and stirred the whole load of hives and truck into a tangled mess.

But the worst of our evils just began to manifest itself; for with the broad daylight, every once in a while a bee would escape and flit in an uncertain way about the wagon. The higher the sun rose, the more the bees got out, till we were really at our wit's end to know what to do. If we stayed there in the road we would block up the traffic, and that would not do. If we went ahead we were sure to be in trouble; for with twenty miles to go, and thirty colonies of angry bees to manage, we had our hands full.

But standing still was not going to help, so I said, "Come on, Bert. I don't believe we can get very far with such a load; but we can try, and may be the bees will not bother very much." So the horses were hitched on again, our bee smudges were lighted, and the war commenced.

Galen Hill is about three miles long, but not very steep. We made the ascent slowly, one driving and the other sending great clouds of smoke on the bees. By the time we reached the top, the bees were under control and our prospects looked brighter. Bert and I both thought that our difficulties had been surmounted as we triumphantly drove through Galen.

The village passed, the level road lay before us. Suddenly, without any warning, something struck me a sharp blow on the face and I felt a burning prick. At

the same moment Bert ducked and fought the air. "Where did that bee come from?" I yelled. "They're getting out. Smoke 'em! smoke 'em! Can't you?"

Just then another vicious insect got me on the hand, and then another and another. A thin stream of yellow bees was leaking from the hives. Bert snatched up the smoker and began to do his best, but all too late. One of the horses jumped and plunged sidewise. Instantly I dropped on the whiffletree and pulled the bolt, with not a second to spare, for the horses leaped and would have bolted, but Bert grabbed one by the head and I the other, and so we got them away from the wagon. They were almost crazy with the stings, but Bert brushed some of the creatures away from their ears, and they became less restive. Little by little we gained on the bees, till the horses recovered their senses. When all was quiet we stabled them in a neighboring barn and turned our attention to the bees.

The wagon was where we had left it, in the middle of the road, and the bees flying all about it. The air seemed full of them. As we came up, how they did sting! I saw the load was blocking the highway, and so by pulling and pushing we got it off to one side of the track and made an examination. It was not one hive that was leaking, but all of them in general. The worst was that we could not find any holes from which the bees were coming, and yet they were coming. The case looked hopeless. Just then a team came in sight. Here was a new danger: Would it be possible for that team to get past the raging bees? In a few minutes the vehicle was right abreast of us, when the horses made one plunge, almost throwing the driver from his seat, and disappeared down the road in a cloud of dust. A few minutes passed, and another came and had the same experience. To help out we opened the fence on one side of the road to let teams pass by through the field; but this expedient did not relieve us entirely, for some would stay in the road in spite of our warnings.

It was about noon when a man came along, driving a spirited team, and tried to get by our wagon. The bees went after him. His horses shied, and then almost balked. He was almost by when there was a crack, and his whiffletree was down and also the wagon-tongue. This was a bad job. In a second we both jumped to help. I picked up the wagon-tongue, and Bert hung on to the whiffletree while the man urged the horses forward. The lady

in the carriage screamed, and jumped up and down with fear. This scared the horses worse; and when she pranced they did too. But the man soon put a stop to this; and as we were all the time getting further from the hives, the bees went back to their company, and our friends drove off.

The automobiles with covered tops got it worse than the carriages. The first one came along just after dinner, at full speed. No heed was given to our warning. As the party drove by, the hood scooped up a fine mess of bees, and there were yells and hoots and plenty of language. As the afternoon wore on, the time seemed interminable. We had been up all night, and were sleepy; but there was no sleep for us, for teams kept coming and going, and it was our duty to warn them the best we could.

When the welcome night fell at last we began to rearrange the load; and after a bit we had things fixed for the seventeen miles that were still before us. By nine o'clock that evening we were again moving. The horses pushed on in the darkness, along deep forest roads, and past cultivated fields. All the time we were so sleepy that we could scarcely hold our heads up. By ten I was so completely worn out that I dared not hold the lantern for fear of dropping it, and tied it to the top of the rigging, still keeping my hand on it. The next thing I knew, Bert was punching me for I had let go of the lantern. The road was far from safe, for on one side was a high cliff, and on the other a deep gorge. If the horses swerved, an accident would be sure to follow. But though we were almost dead from lack of sleep, it was imperative to get on. We must reach our destination before morning, for a second day like the first in the road would kill the bees. So we pushed on, one walking while the other drove, and then the other did the same.

We had been going this way about an hour, when all at once Bert called out that he had missed the crossroad that led to his place. With some impatience I advised him to hunt it up, so we could go ahead like sane people. Off he went with the lantern, and presently returned with the word that he had discovered it. At once the horses were turned about and headed in the proper direction. It did not take long to get to the crossroad, and we were nearing home, with the farm buildings only a mile away. We felt the joy of victory. But this was not for long. In the uncertain light of the morning,

when we came to a small bridge we failed to keep to the center, and the wheels on one side did not hit the planking. Before we could help ourselves the wagon was half tipped over. We could not go ahead. We could not go back. We were simply stuck fast. So we unhitched the horses and went the rest of the way on foot.

When we arrived, Bert's father and the hired man fitted out another team and moved the apiary into the yard, near the house. We boys were a wretched pair to look at, and spent most of the day in slumber. But that did not make us presentable. Only time could do that.

Of the thirty hives of bees, sixteen came through safely. And it may be added that Bert and I have never engaged in the job of transporting bees since that first experience.

[The experiences cited here are by no means unusual. Accidents have occurred more than once in which lives were endangered and much property lost; and it behooves every beekeeper to prepare for the unexpected. No guesswork should be put up with, for the risk is too great. Hives, if old and shaky, should be fastened together with cleats nailed to the covers, bodies, and bottom-boards, and every precaution should be taken to keep the bees from getting out in case a stop becomes necessary.—ED.]

WHITE CLOVER FROM MAY TO OCTOBER

BY L. D. MASSIE

We have had white clover in bloom here since May 4 and there is some in bloom now; but the cold rains and weather kept us from getting much surplus. Spanish needle, goldenrod, and a white flower weed that grows four or five feet high gave a surplus super for extracting and plenty of winter stores.

BEEES FOLLOWING OPENING IN THE WOODS.

On page 618, Oct. 1, Mr. Semper speaks of bees not going in a straight line because of the wind. I have hunted bees in the woods since I was ten years old, and have followed a good many bees to their homes in the trees. I have found some beelines that turn and go very near in the form of a triangle. The bees followed openings in the woods.

I believe I can see a bee about twice as far as Mr. Semper spoke of. I have, by running after the bee, kept it in sight across 40 acres or a quarter of a mile.

Somerville, Ind., Oct. 10.

CREATING A LOCAL MARKET

BY FRANK C. PELLETT

Now that the honey crop is harvested, the next question before the beekeeper is how to find the most profitable market for his crop. Few men have a proper appreciation of the possibilities of the home market. When the writer moved to his present location and began keeping bees in a small way there was but a slow sale for even the little surplus produced. I found a beekeeper in the person of John Dufford already on the ground. He was producing a fine article of comb honey, and putting it on the market in first-class con-



Frank C. Pellett, State Bee Inspector of Iowa.

dition. As would be expected, he had the cream of the local trade, and his customers were so well satisfied that they seldom even asked at what price a competitor was selling. If asked about honey they simply replied, "Dufford always supplies us with what honey we use." Most of the stores also were supplied from the same source. As I did not have a large quantity to dis-

pose of I found sale for it during the year, but mostly in such small quantities as to be annoying. I did not want and could not afford to get customers by cutting the price, for the price was already too low. I had no intention of shipping the few hundred pounds that I had to offer to some other point, but determined to create a market. Accordingly about the third year I put extracting-supers on a few colonies, and put up the product in quart jars. I chose the Schram jar, as it is of clear glass. I find that the honey sells much more readily in these jars than in the Mason jars, partly because of the more attractive top and partly because of the clearer glass, which makes the honey look much more attractive. The merchants were skeptical about extracted honey. People would not buy it, they said. I remember how hard I found it to make a deal with one merchant by which I left half a dozen jars to be sold if possible; and if not sold, to be returned. The first season the sale was slow, but I kept it constantly on display in a favorable situation in several of the stores. Sometimes I sent a liberal sample to persons who might prove valuable customers. The second season I produced more extracted honey and it sold better.

Now I sell all I can produce through one merchant, and do not have to bother about peddling it around. I now work my few colonies nearly altogether for extracted honey, and leave the comb-honey market to Mr. Dufford. Instead of injuring his market I have helped it, and the price has constantly tended upward. Last year I sold about 2000 pounds, nearly all through the one store, and our supply ran out several weeks before the new crop came in. This honey advertising has also helped the store with its other lines, and helped to enlarge their trade. They tell me that they have several regular honey customers who live in Des Moines and Omaha, but that they have become accustomed to our honey, and feel sure of the quality.

This fall at the county fair there was a special exhibit of Atlantic-made goods. The local factories had their lightningrods, wagons, brick, tile, and other goods on display. I prepared an exhibit for my grocer also. An observation hive was used to attract attention to the display. About one hundred pounds of honey was put up in pint, quart, and two-quart jars. Behind the whole was placed a large sign appropriate to the place where the exhibit was placed. It read as follows:



Apiary of American hives belonging to F. Richter, Pottenstein, Austria.

PURE EXTRACTED HONEY
Gathered by Cass County Bees from
Cass County flowers,
expressly for
Stier Grocery Co.,
Atlantic.

A label somewhat similar was pasted on each jar. No one was placed in charge of the exhibit to take orders; but the secretary of the commercial club, who had general charge of all the exhibits, remarked that this exhibit attracted more attention than any thing else in his charge. As a result of this advertising the sales increased so much that the honey we had put up and regarded as sufficient to last the trade until near the holidays was sold within a month. Many new customers are added every month, and this season's crop bids fair to be sold through one grocery before Christmas. Four years ago we could not sell one-fourth as much through six or seven stores in the same length of time.

Instead of having to ship honey to the central markets, or having it a drug on the market at unprofitable prices as formerly, the local stores now take all the honey produced by the several beekeepers in this locality at profitable prices, and ship in honey from abroad to supply the demand long before the new crop comes in. I have not sold comb honey for less than 15 cents

per pound for three years, although I will not produce any hereafter. I get 12½ cents per pound for the extracted and the grocer furnishes the containers. The retail price is 30 cents each for pint and 50 cents for quart jars. I think that Mr. Dufford has found an equal advance in the demand for his comb honey, though he has used somewhat different methods to increase the sales.

There is no doubt in my mind but that the demand can easily be created for far more honey than is now produced, which can have but one result—higher prices and readier sales. It is an easy matter to create a market at one's own door if only a little ingenuity be used in calling attention to the product, putting it up in attractive packages, and delivering a uniform quality. The same principles apply to other produce. This season there was an enormous stock of plums in western Iowa, and thousands of bushels rotted on the ground. We sold ours readily by packing them in small baskets similar to those that the finest western fruit is retailed in. At the same time, fine plums in ordinary half-bushel market baskets were rotting in the same store not ten feet away. One great secret of successful marketing lies in putting your product in a package that will look attractive to the buyer, and at the same

time putting up a quantity just sufficient for immediate use, as most people buy in small quantities.

Atlantic, Iowa.

[There are great possibilities for one who has the ability and the time, to develop the home market. Sometimes a locality is found where not one family in a hundred buys honey, and there is no demand for it. Advertising then works wonders.—ED.]

180 POUNDS PER COLONY IN AUSTRIA

BY F. RICHTER

I take the liberty of sending you a photograph of a part of our apiary. We use only Langstroth hives of American manufacture, and are highly pleased with them. There are about 30 colonies in all. Nos. 12, 13, 15, are hives still in winter cases. We had last year a very good honey harvest—about 180 pounds per colony.

Vienna, Aus., Aug. 25.

TEACHING APICULTURE TO BOYS

BY DR. E. F. BIGELOW

I am sending you a photograph showing the good use I am making of the bees in our experimental apiary. I am impressing upon the boys the lesson that bees are not

quite so bad, at any rate at times, as most people regard them. These boys are the sons of wealthy parents of Greenwich who have a special tutor to care for them and take them around, showing them the interests of nature. They requested that I give them a lesson on bees, and this is their first experience. We opened the hive without the aid of veil or gloves, and the boy just in the rear of the hive passed out the frames to his mates. Though they played around with these bees for an hour there were only two stings in the entire company. One little fellow was quite enraptured with the delights of the little insects, which he viewed for the first time as he sat on the ground gazing into the entrance of the hive. I think this a remarkable object lesson that bees are not so bad as they have been regarded.

Arcadia, Sound Beach, Ct.

A CONVENIENT HONEY-HOUSE AND WORK-SHOP

BY JOHN T. SMITH

The engraving shows my bee-yard and work-shop. In nearly the entire yard I use the Hoffman frame. Part of the yard is run for comb honey, and the rest, some 24 colonies, for extracted honey. Last fall there were 110 colonies in the yard. I lost 50 in the winter, so commenced the season with only 60. I have increased to



A group of boys who have found out that bees can be "tamed."



Back-lot apiary in St. Paul, Minn., that produced from 18 colonies, spring count, over 1400 pounds of comb and extracted honey.

100. Part of the colonies that lived through the winter were weak in the spring; but the strong ones have stored beautiful honey from the white clover.

My honey-house and work-shop is 16x24, all in one room. It stands on cement posts 2 ft. high, 18 inches square at the ground, and 12 inches square at the top. There is also one large post under the center where the circular saw stands. The sills are 8x8 sawed timber, with one cross-sill in the center. The studding is 2x4 and 12 ft. high. The siding is matched, and has two coats of white lead and oil. The walls inside are sheeted with matched flooring. The chimney extends down into the lower room.

The work-bench is by the four windows. As I work I can see all the beeyard. The windows hang on hinges at the top, and fold up out of the way.

I have two doors on the end of the building, and in getting supers ready for the bees I pile them in the left-hand doorway, and from there on to the wheelbarrow for the yard. Also in extracting, the frames are brought in at that door. The cement walk leads up to the right-hand door. By this arrangement I save lots of steps in a season. On the screen-doors the screen extends up 6 inches, with $\frac{3}{8}$ strips of wood to form bee-escapes; also outside the windows, the screen extends up to form bee-escapes.

The upper room has a window at each

end, and I open these in the spring and feed the bees ground meal. I also hang frames of honey from the rafters. The bees soon find their way to it, and do not bother in the lower story where I am at work. The material for the building cost me about \$200, and I did nearly all the work myself.

Bellevue, Mich., July 21.

A LETTER CARRIER'S BACK-LOT APIARY

BY L. E. GAYLORD

I am sending a photo of my yard in the back end of my city lot. I had 18 stands, spring count. I have 44 now. I took off 60 gallons of clover honey and 700 sections. I am a letter-carrier here.

St. Paul, Minn., Aug. 21.

BULK-COMB-HONEY PRODUCTION IN CONNECTION WITH MIGRATORY BEEKEEPING

BY J. J. WILDER

In a previous article I endeavored to answer one of the greatest objections to bulk-comb-honey production in the North by mentioning the use of a non-granulating extracted honey for packing the comb-honey. In this article I wish to mention another way in which the same result may be obtained—that is, by migratory bee-

keeping, or moving bees at the approach of winter from the North to the South, and operating them for extracted honey in the tupelo-gum sections, then at the end of the flow carrying them back, together with the honey which has been harvested. The return north should be made in time for the honey-flow there in order that the necessary comb honey for the packing of the bulk comb honey may be produced.

This is not a new idea, for there has been almost no end of letters that have come to me from northern beekeepers during the last few years wanting reliable information about a venture of this kind. But neither myself nor any one else could give this information; and as such a trip would be very expensive, no one has as yet undertaken it; but we are now able to give more reliable information regarding the feasibility of this plan.

The A. I. Root Company solved the greater part of the problem the past season by moving a carload of bees from the tupelo-gum section after the flow, then back north in time for the flow, and thereby harvesting a good crop of honey at both ends of the line. Now the question is, "Can bees be brought from the North down, and the project carried out with good results and profit? Of course, this adds much more expense, and makes the problem a more difficult one; but I have taken up the matter with a few of those

who are very anxious to try the venture, and I here give a letter from Mr. George H. Rea, of Pennsylvania, whose location probably represents what would be about the average distance which would be covered in a trip of this nature from the North to the South. The rates given refer to the Okefenoke Swamp in the lower part of Southeast Georgia.

My dear Mr. Wilder:—Your very kind letter is before me, and I am much pleased with the favorable information that it contains. I know that your information is reliable; and from what you have told me I can see no reason why migratory beekeeping would not pay. You ask me to find out what it will cost me to move a car, and then you can better advise. The Georgia Southern & Florida R. R. have quoted me 75 cts. per 100 lbs., 20,000 lbs. minimum per car. That would make the car cost me \$150 besides my car fare, which would be about \$30. So you see it will cost me from \$350 to \$400 to move the car down there and back again in the spring; and in addition to this will be the expense of my boarding and hauling of bees, etc. The probable expense would be about \$500. Is this estimate too high? What can you tell me about living expenses down there? Will the honey crop, gathered there, from 200 colonies, justify this large expense? I should want the bees to pay not only all expenses, but to make some money for me besides.

Reynoldsville, Pa., Oct. 5. GEO. H. REA.

I think Mr. Rea has slightly overestimated the total expense from the time the bees are prepared for the trip until they have been returned and set on their stands for the flow in the North. Assuming that his estimate is correct (and surely it is on the safe side), that of the entire expense being \$500, let us leave off the last sentence of his letter. I think that the



Smith's mouse and ant proof honey-house and work-shop.

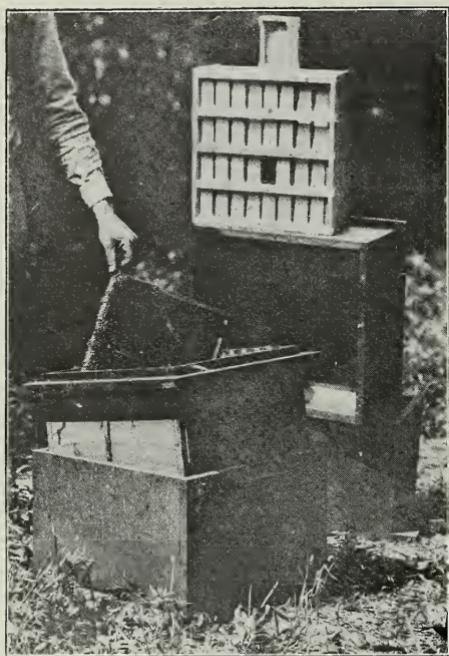


FIG. 1.—A double-walled, air-spaced hive of an old pattern, used to some extent by F. B. Cavanagh, Hebron, Ind.

good climate here and the successful wintering of the bees would amount to more than the actual expense.

The A. I. Root Company's last carload of bees left the Southeast on May 27, p. 374, and arrived at Medina in time for the basswood and clover flows. By May 27 our spring honey-flow from all sources is over. This includes the flows from tupelo gum and gallberry, which last about 35 days, one following the other without any intermission. The average surplus is not less than 40 lbs. each season. Of course the bees must be in fair condition at least to harvest this amount as an average. Based on my own experience, the net amount of honey from 200 colonies would be 8000 lbs.; and at 7½ cts. a pound net it would amount to \$600. Some seasons the sum might be higher, and now and then there might be a season when it would be lower. Now, this would not be a very good paying proposition at this end of the line; but at the other end it might be more profitable if the bees could be landed on their stands there in good condition, for they would surely leave the South in good shape. The hives could be closely extracted before being moved southward, as the spring ty-ty would give a good flow very early, dur-

ing which they could build up and be in the very best shape by the time the heavy flow came on, and some valuable increase could surely be made while here.

Cordele, Ga.

A HEAVY DOUBLE-WALLED HIVE HAVING SOME DECIDED ADVANTAGES

BY F. B. CAVANAGH

In Fig. 1 is shown a hive which, though far from ideal, has some excellent features, and is an especially good winter hive. It is made of $\frac{7}{8}$ material throughout. The outer case is about 18x20, outside measurements. The inside case, or stomach, as it is called, is 16x17½. It contains ten deep frames about 12 inches deep and 15 long. The stomach has a water-table within $\frac{3}{8}$ inch of the upper edge, which supports it on the outer edge of the wall case, allowing the lower edge of the wall to come within $\frac{1}{2}$ inch or so from the bottom-board. The latter is a plain board the size of the outer case, the entrance, $\frac{1}{2} \times 6$, being cut in the lower edge of the wall. There is but a scant $\frac{3}{8}$ between the outer and inner cases. The water-table supports the cover, which is shown resting on the edge just under the comb-honey super in Fig. 2.

In Fig. 2 is shown the comb-honey super in place. When tiering up supers, rims of the same dimensions as the lower part of the cover are used to build up to the proper height around the super. This gives the double-wall effect in both hot and cool weather, which is no small advantage.

In Fig. 2 is shown an attempt to produce comb-honey without separators. In the picture are shown some of the best specimens. We had others not so good.

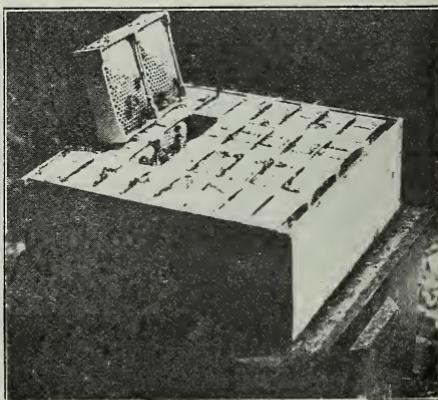


FIG. 2.—Comb honey produced without separators.



FIG. 3.—A cheap hive-stand that leaves room for the toes under the bottom-board.

When I learn the trick it will be time enough to write it. I used $3\frac{1}{2} \times 5$ 7-to-the-foot sections, open on four sides.

Fig. 3 was taken to show our famous I-beam hive-stand, invented by others but original with me. The principal advantages are cheapness, lightness, and a place to put one's toes under the hive when working. Also stray queens can not beguile bees beneath the hive and build combs without being detected, and I believe an open stand rots the hive-bottom less than a closed one.

Hebron, Ind.

HORIZONTAL COMB METHOD OF SECURING QUEEN-CELLS

BY ISAAC HOPKINS

Referring to my letter published Aug. 1, p. 479, and also to the footnote, I wish to say that, if illustrations 1 and 3 had been printed the other way up, as the photo prints were marked, they would have looked much better. As the cells are foreshortened in the photo, they look much smaller than they really were.

PREPARING THE COMBS FOR CELLS.

In the copy I sent I wrote, "I prefer a last-season's-built comb that has *not* been bred in." The word "not" was left out when the article was printed, making me say the opposite. By all means use a bright clean comb that has *not* been used for breeding purposes. You will note that I say, "save every fourth row of cells, and scrape out the intermediate

three rows, though the comb in Fig. 1 shows only two intermediate rows scraped out. The illustration shows the comb used in the first trial, which resulted in the jumbled lot of cells shown in Fig. 2. Further experiments convinced me that it would be better to scrape out three rows. KILL ALL EGGS IN THE INTERMEDIATE ROWS.

After cutting down to the midrib beside each fourth row, the intermediate rows scrape out very easily by using the point of a wide bradawl; *but most of the eggs are left behind*; and unless these are all killed

the bees are as likely to build cells over them as over those in the rows, and make a jumble of cells. A small stiff brush, if run along, will kill them. I prefer a splint dipped in wax for killing eggs in cells, rather than a phosphorus match, as I think the phosphorus does harm.

DEQUEENING THE COLONY FOR CELL-BUILDING.

I notice Mr. F. Greiner says, *American Bee Journal* for June, p. 176, "Mr. Dines dequeens about six or seven days before he gives the prepared comb." Our plan, which works all right, requires two for the work. One dequeens the colony chosen, by making a nucleus colony with the queen, two frames of brood, bees, and a frame of food. The rest of the unsealed brood without bees is put into the upper story of a strong colony. The other, in the mean time, is preparing the comb; and when ready it is put at once into the hive for queen-cell building, so that the colony is not queenless for longer than half an hour, and in less than 12 hours the queen-cells are well under way.

RETURNING QUEEN AND BROOD.

Unless we wish to retain the queen in the nucleus colony we return her and the brood to the hive on the fourth or fifth day, usually on the fourth after she was taken from the hive. She, of course, is placed in the brood-chamber with a queen-excluder over the frames, and the cells above, where they mature. There is practically no loss of time, as the queen can



George Edward Newborn, grandson of J. L. Newborn, Snow Hill, N. C. The baby's diet is oatmeal, milk, and honey. He was just two months old when the picture was taken.

lay in the nucleus hive if given an empty comb, and need only be out of the hive for four days.

COMMENTS ON THE FOOTNOTE.

The statement is made that, when more than two dozen cells are raised in one colony, the queens are likely to be short-lived. I say yes, most certainly, if they are raised in small colonies with few nurse bees; but as we raise them in extra-strong two-story colonies in the height of the season, with numberless nurse bees, then there will be 60 or 80 cells containing lots of unconsumed jelly after the queens have emerged, and these queens will be healthy and long lived. Why should they not be? The bees are not unnaturally forced to build cells beyond their inclination by this method; but it is optional with them. Under the conditions mentioned, in the proper season for queen-rearing, there will be a larger number of fine cells built in a natural manner by this plan than by any other I know of.

You say it may be advantageous for beginners and honey-producers who haven't time to learn the intricacies of grafting. I really don't see that there are any difficulties in grafting that can not be overcome in a very short time. There is certainly more trouble without any gain that I can see, unless you count economy in the

number of bees used in raising cells a gain. In my opinion, the grafting system, taken generally, is responsible for more worthless queens than it is possible to calculate. It is possible, no doubt, for as careful a breeder as Doolittle to get the best out of the system; but how many Doolittles are there? Where good eggs are provided, and the cells built over them by the bees in a natural manner in the proper season, one can not fail to get good queens with a minimum of handling and risk.

Auckland, New Zealand.

WHY GRADE HONEY BY ITS COLOR?

The Darker Grades Often the Best

BY HENRY REDDERT

I have often wondered why honey is graded according to the color instead of the flavor. I notice, page 638, Oct. 1, C. W. Ludlow recommends blending to get a uniform color every year. I should think flavor should always be given the preference to color. Why not designate honey as white clover, sweet clover, buckwheat, catnip, dandelion, fruit blossoms, or the name of whatever blossoms it is gathered from? Is it a fact that dark honey is inferior to light honey? Let us analyze it.

The year 1911 was a poor honey year in our district. The spring was cold and wet. Locust was in full bloom, but the bees had but a few days to work on it, barely enough to keep up brood-rearing. Clover amounted to almost nothing. Dandelion was the only plant yielding a surplus. Now we all know that this plant secretes nectar having the color of the flower, a dark golden hue, called amber, as I understand it. This color brings a second-grade price in the grading rules. But how about the flavor? I have about 90 pounds left, which I would not trade for the best white-clover honey; but remember, I left this honey on the hives until the end of the season, which means that it was thoroughly ripened. Those that had the good fortune to test it, pronounced it the best honey they ever tasted. Color was no object; the flavor is what they wanted.

Locust honey is amber colored, yet I have heard expressions like this: "Honey for the gods." Buckwheat has a dark syrupy color, yet who will say that the flavor is not fine?

Four years ago, all sources failed in this section except catnip, which was very abundant. This honey is very dark—in fact, so dark that a so-called "honey expert" re-

marked that it was city honey, for out in Indiana where he lived honey was much lighter. He meant, of course, that my honey was adulterated. The fact is, that those local customers I had liked the flavor so well that it was hard to convince them the next season (when most of our honey was white and sweet clover) that the latter was just as good a honey as the former.

We all know that sage honey is as white as any honey on the market. A fellow beekeeper bought several 60-pound cans the year I had the catnip. He and I traded for our own use. He pronounced the catnip honey "*par excellence*." The sage honey was given to one of our neighbors to test. She claimed she liked the catnip (dark) flavor better. To me all honey is alike, provided it is well ripened by the bees. A thick, rich honey sparkling as the morning dew is good enough for any one regardless of color.

I have never heard a foreigner designate honey by color; the flavor is what he mentions. Who will say that our Germans, Englishmen, Scotchmen, and especially our Hungarians (the last named are great honey consumers) don't know good honey? People will buy New Orleans molasses (which is almost as black as coal) only for the flavor. Maple syrup is amber color, and yet who will claim that flavor is not the incentive? Beekeepers have spoiled their own game by advocating color for quality.

Sugar, before we had the present refining process, was yellow, rich in saccharine juices, the very essence of sweetness, but is now white as snow, the best qualities taken out of it. Flour ground in the olden days was amber colored, now white as the miller can make it by taking the gluten, the very elixir of life, out of it. A few years ago I had the good fortune to work with an old experienced chemist. One day he was asked by a catsup manufacturer if he could devise a process to eliminate fermentation. He experimented, with the result that he must take out the ingredients that compose the color of the tomato—as he afterward remarked to me, "The very life of the catsup." If this chemist should take the color out of our dark and amber honey I doubt if there would be much sweetness left. It can be determined only by chemical analysis whether light honey is as rich in sweetness as the darker qualities.

Now what I wish to propound is this: That the consuming public should be educated to prefer flavor to color, thereby setting the darker honeys at no disadvantage to the lighter, and incidentally securing a uniform price to beekeepers in gen-

eral. Beekeepers should also understand that they have no right to ripen honey artificially. Let the bees do this; they are the only ones nature designed for this work.

Cincinnati, O.

[It depends largely upon what the customer is used to. For instance, if the honey "we used to get on the farm" was dark, then the darker grades are usually preferred. On the other hand, if it was light, then the darker grades are not liked as well. Probably the majority of consumers, taking the country over, prefer the milder honey which does not have such a strong flavor as most dark honey has, and yet is just as sweet. We believe our correspondent is right in believing that the color should be a minor consideration compared to the taste.—ED.]

HOW LOCALITY AFFECTS THE QUESTION OF THE CHOICE OF HIVE

BY C. A. STEVENS

I have been a reader of GLEANINGS off and on for many years, and have been very much amused at the persistency of many of its regular correspondents in the way they put forth their pet hobbies, almost forcing one to believe their method the right and only one. The latest, that of Mr. A. C. Miller, was the best, the way he came back at the Ontario correspondent.

When I started out to become a bee-keeper, my father-in-law, Thomas Valiquet, one of the most advanced beekeepers of the Province of Quebec in the 60's and 70's, gave me five colonies of bees (Italians) in Quinby hives, saying that was the best hive yet put out for the Province of Quebec, and that, if I hung to it, and to Italian bees, I would get along all right. For some years I did get along, and had a fine apiary. Moving to Texas in 1882 I could not get Quinby hives there; and as the Langstroth hives were being advocated I changed to that type. So long as I remained in Texas I got along all right; but on returning to Quebec, when I put away 38 colonies the first fall, I lost them all.

My next trial was with the "Jumbo," as this was the nearest I could get to Quinby hives, and I built up a fine apiary again. Then came the Danzenbaker hive. This caught my fancy again, and I bought a lot of them, transferring and cutting my Jumbos down to the Danzenbaker depth. The first year I put 30 colonies into winter quarters in good shape, well stocked

with bees and honey. The next spring I had seven queens, some of which had only a pint or so of bees. They had all starved. I put the seven queens and all the bees there were into one hive and left them to their fate. I had Caucasians, leather, and golden-all-over Italians, Carniolans, Banats, etc. Some time in July I examined them to see what had happened. I found I had a hive full of leather-colored Italians. I tiered it up one by one until it was seven Danzenbaker stories high. In the fall I took off three stories full of honey, leaving the rest for winter. Mrs. S. is also a beekeeper; and, thinking there was too much honey, she took off two more. I fixed the bees on their summer stands, *a la Miller*, and then built a second wall of matched boards all around them, banking them with snow. The next spring the winter broke early; and when I opened them I had a colony full of bees. There was a week of fine weather, then came a heavy fall of snow. When I looked at them again they were all dead—starved to death with not a particle of honey left.

I now had an equipment of over 50 Danzenbaker hives, sections, etc., with no use for them. The next year a neighbor had two colonies of black bees, and he did not want them, so I took them. In the fall I had five full colonies of Carniolans and Italians. Not wanting to throw away my Danzenbaker hives I doubled them up, using two of them for winter quarters; and when I put them in my cellar they weighed 100 pounds—all I could carry. The next spring I put the five out. Two of them, one Carniolan and one leather Italian, were teeming with bees. Two of the others were in fair shape, and the other was queenless, but had a good colony of bees. On the 29th of May the Carniolan swarmed out. I was very much astonished, as there had been nothing excepting the willows for them to work on. When I investigated I found the two Danzenbaker hives full of brood, with plenty of honey, and from ten to fifteen queen-cells in each hive, some of them sealed over. I now had two Danzenbaker hives ready to divide, and a swarm. I moved the two Danzenbaker hives to new stands and put the swarm on the old stand. To-day I took one Danzenbaker section full of the whitest honey I ever saw, and one hive full of the honey—32 sections of 4x5 full, and ten Danzenbaker frames full of the same. There are still two hives with all I can lift ready for winter quarters. That makes three colonies from one, with six hives left for winter, and over 50 pounds of extracted and 32 pounds of sections.

My Italians followed the Carniolans, and I did the same thing with them, making three out of one; but they gave me but little honey.

Our foul-brood inspector was here to-day—the first and only one I ever had visit me in 30 years. I showed him what I had. He said it was remarkable, from the fact that there was but very little honey in Quebec this summer, and that many of the beekeepers were feeding for winter, and had had no surplus. He had been all over the province; had found foul brood in many places, some of it within two miles of me; but my bees have never had it, and I don't know what it looks like. Most of it (in fact all) is where black bees are kept. I keep black bees only long enough to get an Italian queen in their place.

The ideal hive for wintering in Quebec would appear to be two Danzenbaker brood-chambers, thus making a square hive. Mr. Valiquet claims bees, if allowed to cluster where they want to, will be in the center of a hive. That's where mine cluster in the two Danzenbaker bodies—between the two, right in the middle.

St. Lambert, Que., Oct. 1.

BEE PARALYSIS A MOST SERIOUS DISEASE IN AUSTRALIA

**Some Glimpses of its Ravages, Showing that it is
Not a Simple Trouble to Deal with; Italians
Not Immune**

BY MAJOR SHALLARD

On p. 332, June 1, Mr. Samuel Simmins has something to say on the subject of bee paralysis. There is only one possible crumb of comfort in the article, and that is where he mentions "a warm curative solution." What is the solution? I want it if it will cure bee paralysis, and so does practically every beekeeper in Australia; but I "ha' me doots." He states that N. S. Wales was visited by this trouble in 1894, and other parts of Australia in 1906. I should like to say that these diseases, though perhaps the same, had different symptoms.

The first I knew of the trouble was when it broke out in California. It was known then as the California trembling disease.

A little while after, it appeared on the Hunter River, N. S. Wales, and afterward spread all through the colony. The affected bees used to come out of the hive, spread their wings with a trembling motion, make short hoppy flights, and eventually give up the ghost. We always got the

trouble in very hot dry weather, and I used to keep a boy going around with a very weak solution of salt water. He used to lift the lids and dash a cupful over the frames of the hives. I used to call this "heat paralysis," and it never did a great deal of harm.

Next we got a more malignant form of the trouble. The bees used to swell up and die in such numbers that there would be from a cupful to a dipperful in front of each hive each day. No colony could stand this strain, and many soon ceased to exist. We used to requeen to effect, if not a cure, at least some mitigation. We were told the disease was in the queen; but I think it was a case of the blind leading the blind.

When I had been keeping bees twelve months I knew all about it, and was ready to put the whole world right. When I had been at the game twelve years I did not know half as much, and I was not at all sure of the correctness of what I did know. Now I have been at it for more than double that time and I know less than ever. One thing I am very sure about, and that is, that I know nothing about paralysis, and that is why I hailed with delight the statement in *GLEANINGS* that some of your scientists are investigating the disease. It is, without a doubt, the greatest curse that ever struck the Australian bee world.

We know nothing about it; we never know when it will hit us, nor why it comes, nor any thing about it. If a man had asked me twenty years ago how many colonies I had I would have said 800, and I would have been sure about it; but if one asked me now, and also asked me if I were sure, I would become suspicious that he knew something, and I would want to get around the farms soon to make sure. A man never knows what he has. He might have 1000 colonies now, and not 200 in a month.

For instance, one of my farms was giving me an extracting of a little over two tons every month up to last March. About the end of April I went out with the gang to extract again. Not only was there no honey to extract, but the colonies had dwindled until most of them would cover only about three combs. We moved on to the next farm, ten miles away, and the conditions were the same; and a month before they had been rolling the honey in wholesale. Yet the farm I originally started from was all right, and showed no signs of paralysis. The bees were not dead about the hives. There were a few

odd bees hopping about. They had simply disappeared. They went into winter quarters in this state, and I am expecting a big mortality in the spring, which, I am glad to say, is not far off now. I have known a whole farm to die out in a month; and in all of these cases there is any amount of honey in the hives, and often several frames of brood, but no bees.

At one time we only had to see that each hive had enough stores, and we were safe; but now we are never safe for a single month. No wonder I am getting baldheaded; but still I don't growl, you know—just "count your many blessings," and keep scratching along. If this were all the puzzle there is in the matter it would be bad enough; but how do you account for the fact that you can keep bees in one place, and they hardly ever get paralysis, and yet only four miles away you can't keep bees because they get paralysis, and die right out without constant attention? How do you account for the fact that a farm (my own) will get paralysis, and need constant watching, and another, only two miles away, gets none at all? I had a lot of rivals start in the bee business when they saw me getting crops; but they started in this paralysis country, and all the farms died out the first year. I know one man whose bees always had paralysis more or less. He moved some of them into a splendid location so far as bee pasturage was concerned, but, although he gave them constant attention, they nearly all died. I know another man who had over 200 colonies in splendid order on the old site; but he got dissatisfied with the quality of the honey he was getting, and moved the lot to within two miles of the former man. He met the same fate. They all died from paralysis. If it is the feed, why do not both farms, only two miles apart, suffer? or why don't the two farms, four miles apart, suffer? This does not apply to just one small portion, but to parts of Australia hundreds of miles apart. Only last March my bees, 400 miles south of here, were in splendid order, but they suddenly died off, leaving them all very weak to go into winter quarters.

I have been patiently waiting for some other microbe to come along and eat this paralysis fellow up; but he is a long time coming.

To say, as Mr. Simmons says, that bee paralysis will never make headway where the owners use Italians is not correct. I wish it were. I have been keeping bees for my living more than half my life, and I

have always had Italians, and the other people I have mentioned have Italians also; but it has not checked the disease. He says, "It is one of the most simple diseases to deal with." How I wish that were true!

He says Mr. McDonald introduced it by buying infected bees. I will give an instance: On one occasion it suddenly attacked the farms of three beekeepers (queen-breeders whose bees had never had it before). They were all located within a mile of each other. The first one whose bees that got it rushed over to the second, and found that it was there too. He went back to his own farm and fought that disease for a fortnight, when it disappeared. He then, having nine, called on the third beekeeper, who protested loudly that he had not had it; but as he explained to me a couple of days after, his colonies were very weak, and his yard had all been swept with a broom.

Now this visitation hit these three farms at one time, practically on the same day, at one time. Mr. Simmins infers that the disease can be cured by a suitable medicinal agent. Will he give us this agent, or will any one else who knows? I am quite satisfied that, although I have been living with it for years, I know nothing at all about it.

Mororo, N. S. Wales.

POSITION NUMBERED, NOT HIVES

BY H. F. HART

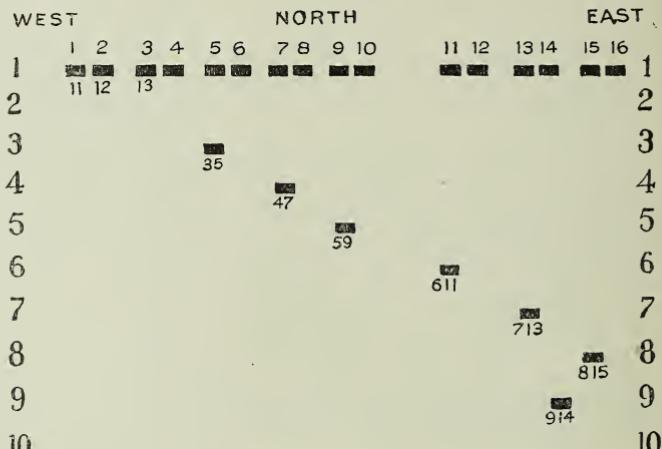
While my system of hive-numbering is similar to Louis Macy's, page 489, Aug. 1, my row number comes first, hive number second; first hive in first row is 11; second hive 12, and so on.

My apiary is arranged in blocks of 10 rows of 10 hives in each. The hives are arranged in pairs, put on stands made of 2 x 6 scantling 4 ft. long, end to end, not side by side, and facing east and west. This allows one to be always working on the south side of the hive, with the sun at the back shining on the frame. But in this way the entrances are further apart

than they would be by Mr. Macy's plan. The alleyways are freer of obstruction for the wheelbarrow.

To facilitate numbering the position of the stand, the number of the row is painted on the fence or a stake, and the hive number is also painted in the same way.

The diagram below shows the arrangement of the hives; and the figures under east and west show the initial or row number on the fence or stake; and the numbers on the north show the hive number painted in the same way. The hives are spaced 6



ft. apart between entrances, and 6 ft. between in the rows.

I have been using this arrangement of hives for the past five years, and the numbering for ten or twelve or perhaps more; and after laying out some twelve or fourteen apiaries in the last 25 years I would not change either the method of numbering or the plan for the hives. I have this method in use in an apiary of 350 colonies now.

Allenville, Ala.

A STRONG COLONY WITH PLENTY OF STORES WILL STAND ALMOST ANY KIND OF WINTER

BY L. M. BROWN

I was a disciple of Mr. A. I. Root when he took an active part in apiculture in the 80's, and I should like to give the "gist" of some of his advice on wintering.

Have booming strong colonies, then select four combs holding in all at least sixty pounds of honey, and crowd the bees down on these four combs, using a chaff division board on each side.

I formerly had the two-story chaff hive

and filled the upper story with a chaff cushion, and I found by experience that a good colony so arranged would pull through ninety-nine times out of a hundred. Talk about condensed moisture! A strong colony so cared for has no room for any thing like that. In some of my weaker colonies I found some condensed moisture, but not enough to hurt any thing.

The new double-walled hives are an improvement, I believe, over the old two-story chaff hives and will answer just as well; but let me explain that Mr. A. I. Root used to insist on oat chaff. Take a box of oat chaff and another of wheat chaff, and on a zero day thrust your hand down into each and see which hand feels the more comfortable.

Here in the Salt River Valley our bees keep up brood-rearing through October and commence it again in February. I generally divide my bees toward the last of February. I am speaking now of the Salt River Valley. There is not a day through the winter when our bees can not fly about if they wish to, although in mid-winter there are sometimes two or three days of rainy weather which confines them.

Apparently, there is no foul brood in this valley, but no one should imagine that we never have any troubles. I divided my colonies on the 23rd of February last spring, and at just the time for the young virgin queens to fly, countless thousands of bee martins filled the air, and but a small per cent of the young queens ever came back. This year I intend to buy what few queens I need. These martins were here twelve or fourteen days, and all of my colonies suffered, some of them becoming very weak in field bees. But even if there are no bee martins to catch the young queens, I think it is more profitable to buy queens than to try to raise them here, as there are so many drawbacks to a successful mating.

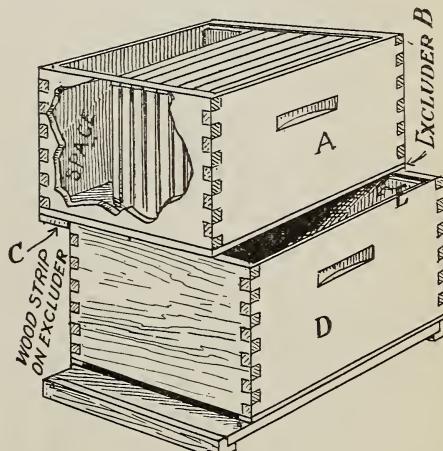
Phoenix, Ariz.

A NEW WAY TO SIFT THE BEES TO FIND THE QUEEN

BY B. KEEP.

Among all the methods proposed for finding the queen, there is none more nearly certain than "sifting." The method of doing it is about as simple and easy as can be. Fix up a wood-frame zinc queen-excluder, with a thin three-inch wood strip, to be attached under one long side of the frame so as to close that much of the perforations, measuring from the outside

of the frame. This is the only extra preparation necessary. Now lift the hive body (containing the colony to be sifted) off its bottom-board, and set an empty body in its place. Lay the prepared excluder on this empty body, having the edge of the three-inch strip against the outside of the body. This leaves an open space along the opposite side wide enough to pass a brood-frame through easily. Set the hive body containing the brood-frames and bees upon the excluder exactly. Remove the outside frame from each side, shaking and brushing the bees back upon the remaining frames. Set one of these frames aside, and put the other into the body below through the opening before mentioned, and push it along on the rab-



bets out of the way. Now move the brood-frames in a mass over to the hive side next to the opening before mentioned; then, beginning with the frame furthest from the said opening, shake and brush the bees off and down on the excluder, one frame after another, putting each, as cleared, down into the under body, pushing each and the preceding frames along out of the way to admit the next. Last of all, put in the frame previously set aside. If care is used, the brood-nest will be transferred from one body to the other without in any way changing the arrangement of the frames.

The smoker should now be used very moderately to drive the bees down sufficiently to see the queen, if she is there. It is not necessary to shake, drive, or smoke the few remaining bees. Just set the body to one side, and they will soon leave. If there is any simpler way to sift for the queen, let us know it.

Hoboken, N. J., April 24.

Heads of Grain from Different Fields

Getting Rid of Drone Comb; the Purpose of the Follower

Does brood comb ever get old? If so, should it be replaced by new foundation?

After an extracting-comb is used repeatedly, should it be changed for a new one?

If so, what is to be done with the old comb? On the other hand, are the old combs more valuable for extracting purposes than they are if transformed into beeswax?

If an old comb happens to become a drone comb at a time when worker-cells are urgently needed, can the drone part of the comb be cut out and a piece of worker comb fitted in?

A short time ago I purchased five fairly strong colonies. The man who sold them to me is not a beekeeper, having bought the bees with the place. How can I tell whether they are the first or second swarms? My colonies are all Italian. What do you think of fig trees for the purpose of shading the hives? I expect to establish my apiary somewhere on the Indian River.

As I am deaf, please tell me how I can tell whether or not the bees are cross.

How often should each hive be examined? How can I tell whether the honey-flow ceases suddenly or is decreasing gradually?

Do I understand that there are no regular bees in robber-traps?

Please explain the value of the follower and the division-board.

Orlando, Fla., Sept. 24. L. P. JONES.

[If your combs are straight, and if they do not contain an undue proportion of drone-cells, there is no object in cutting them out and replacing with comb foundation unless there has been some disease about your apiary, such as foul brood of either type. If this is the case, it pays to renew the combs, of course, in order to prevent the disease from breaking out again; for the germs of the trouble lurk in out-of-the-way places about the comb in small amounts of honey in some of the cells, etc. It depends upon circumstances whether all the combs should be renewed at once, or whether only a few at a time. If there is no disease, and you are merely wishing to replace crooked or drone comb, you can replace one or two at a time with comb foundation. The best time to do this is in the spring or early summer when the bees are building comb. In this way you do not obstruct the work of the colony to any great extent. If you have a large vat into which you can throw the combs while they are in the frames you can generally get them free from the wires, leaving the wires still in the frames, and then imbed the same wires into a new sheet of foundation. If you have no way of melting the combs out of the frames in this manner, you may find it more convenient to cut the wires and then rewire the frames after the latter have been scalded and made otherwise clean.

An extracting-comb, if it is straight, and free from disease, hardly ever needs renewing. In fact, the old combs are tougher and even better than new ones.

You can sometimes cut out drone-cells and fit in a piece of foundation; but the bees are likely to build drone-cells again around the edges of the patch, so if a comb has very many drone-cells it pays to cut it out entirely, melt it up, and replace with a full sheet of foundation.

From the description of the bees that you bought, we can not say whether they are first or second swarm. About the only way to tell would be to judge of the comparative strengths of the colonies; for if they completely fill the hives so that the hives are boiling over with bees, as the saying goes, it is probable that they are first swarms or parent colonies that have cast but one swarm.

Fig-trees would probably be all right for partial shade, although we do not know that we have ever seen them so used.

If the bees are cross, you can tell very quickly by the way they fly up and attempt to sting when you are handling the combs.

It depends on circumstances as to how often a colony needs examination; but ordinarily it should be looked over once in two weeks any way,

to make sure all is right. When the honey-flow suddenly ceases, the bees become much more irritable, and the bees stop flying into the hives in that industrious manner that they have only when they are gathering honey.

Robber-traps may catch a few innocent bees as well; but they get the robbers mainly, and prevent them from flying.

The follower in a hive should be used close to the outside frame when there are not the full number of frames in the hive, to prevent the bees from bulging that comb. It is also very convenient when the full number of combs are in the hives, for it is easily removed, and then there is space to pry the other frames apart. If the frames completely filled the hive, it would often be difficult to remove them. The follower is also sometimes called a division-board. A chaff division-board is a thicker one padded with chaff for use during the winter as additional protection.—Ed.]

The Shaken-swarm Plan; Has it been Abandoned? the Doolittle Method

As I desire to produce comb honey exclusively, and also to establish an out-apiary soon, I have for some time been studying the best methods for operation, and am very much impressed with the plan given by Doolittle in his "Year's Work in an Out-apiary." But in the bee journals of the past few years, some doubt has been thrown on the shaken-swarm method previous to preparation for swarming. This is Doolittle's strong point, I believe. In view of the fact that he did this work during the years 1905 and 1906, I should like to know if the following years' experience on his part, or, in fact, on the part of any large apiarist, has proven this policy to be "laid on bed rock." If there are any modifications of his plan as then outlined, please let us hear of them. Toronto, Ont., Sept. 16. CHAS. E. HOPPER.

[The shaken-swarm method is just as effective in every way. It is true, there has been less said about it in the bee journals, and possibly that fact might make it appear that no one is using it now; but, as a matter of fact, we believe that some of the best honey-producers in the country are still using it. It is invaluable to the professional man who has to be away from the bees practically all day, because he can practice it at any time that is convenient—on Saturday afternoon, early in the morning, or in the evening when he is at home; but there is no use in attempting it until the bees have made some preparation looking toward swarming. Mr. Doolittle makes that point quite clear.

With regard to Mr. Doolittle's having tested out his method during 1905 and 1906, if we remember correctly he did try it out with practically the same results. But we may say this, that the Doolittle method of shaking swarms can not be carried out very satisfactorily unless there is a fall flow like buckwheat. You remember, if you followed out the method, that Mr. Doolittle arranges to have a large number of combs of sealed honey in the fall. These he carries over until next year, and then gives to the bees in order that they may feel "rich in stores."

With regard to the question of whether others have tried this same method or not, we may say that we have had a number of reports from those who have tested it; and wherever there is a fall flow of honey the method seems to work out well in the hands of others as well as those of Mr. Doolittle. In this connection we should be glad to get reports from those who have tested out the Doolittle method of producing comb honey as well as controlling swarming. Surely, during all these years, there must have been a very large number who have tried it, and can, perhaps, now give us some very interesting data.—Ed.]

Eucalyptus Burned

Brush fires swept away the eucalyptus forests last autumn all through this district, and ruined the prospects of this season's honey crop, besides burning 15 colonies of bees with abundant stores. Hahndorf, South Australia, Aug. 7. J. J. DARBY.

Is the Fact that the Bees Gather Pollen Proof that they Have a Queen?

I have had some success with my bees. A swarm issued Sunday, June 30. Four days later I removed two supers full of clover honey, but eight of the sections were not thoroughly capped. I have just taken a super from the parent hive. The honey is a bright yellow, which I presume is sunflower, as there is quite an abundance of this in this vicinity, and it yields well. Asters and goldenrod are not so plentiful. Ten days after hiving the swarm the bees were working on the eighth frame. Three days later they were filling out the foundation on the tenth frame. I then put on the remaining super. I thought that last super would come off full too, but not so. The best the bees could do was to give me four boxes fairly finished with a little in seven more.

I have given two-thirds of my honey away to my neighbors. They have all come back wanting to buy more. When I told them there was no more, and that they could get it at the grocery, they all said that they didn't want that kind, as it was manufactured honey!

When removing the first two supers no honey-board nor bee-escape was used. I had a troublesome time getting rid of the bees. I smoked, shook, and brushed them until I was tired. With the last two supers I used a Porter bee-escape and board, which I found much better. I am now preparing for winter. Both hives are completely filled with bees, with the brood-nest full of stores. Is it not a sure sign, when pollen is coming in, that the queen is laying without opening the hive?

Brooklyn, N. Y., Sept. 25. DENNIS HEWITT.

[When bees are bringing in pollen it is almost a sure sign that they have a queen; but it can not be regarded as a positive sign, since there are occasional reports of queenless colonies that gather pollen.—ED.]

Fermentation of Comb Honey

Some of the beekeepers in this vicinity have had much trouble this season with fermentation of comb honey. None of us have ever had any difficulty of this kind before. I have found considerable fermented in the hive where all of the honey was thoroughly ripened. All of it was of a light-amber color. None of the dark poplar, clover, or sumac fermented. We are at a loss to know the cause. Mine was kept in a warm well-ventilated place as heretofore.

Helena, Ark., Oct. 7.

S. A. FULLER.

[This is a little unusual, although several times before we have heard similar reports from different parts of the South. Who can throw some light on the question?—ED.]

"Automatic" Hiving, Etc.

On page 271 is a photo of a man hiving a swarm automatically, which reminds me of a brakeman on the train from Syracuse to Auburn telling me he set a new hive at Lyons, N. Y., close to the trunk of an apple tree in the morning before leaving, and in the evening, on his return, he learned from his wife that a swarm came out that day, and clustered on the said trunk low down, and gradually crawled into the hive.

Mrs. Luter, of Beaverton, near Orvillia, left her 13-year-old inexperienced uninterested daughter home one holiday, July 1, to watch the bees. Of course a swarm came out, and it clustered low down on a currant bush, so she donned a pair of fur mitts and a miserable veil and hat, and set a hive about a yard away. Of course, they did not find it.

Little Britain, Ontario. FERGUSON WHITESIDE.

How Much Syrup Must be Fed to Make 20 Lbs. of Sealed Stores?

I have several hundred colonies of bees that need feeding more or less, and I should like to ask how many pounds of feed would have to be given to a colony to supply it with 20 lbs. of ripe stores. If it is not too late, how about the following proportions? Boiling water, 1 part; cane sugar, 2 parts; one-third as much honey as water. I should like to have you furnish me with some figures as a

basis to work on, and hope to hear from you at once.

Janesville, Minn., Sept. 16. E. L. HOFMANN.

[It would take about 23 or 24 pounds of syrup, made one part water, two parts sugar, and one-third as much honey as water, in order to make 20 pounds of ripe stores. A well-evaporated syrup will contain about 20 per cent of water and 80 per cent of sugar. But a syrup would not be too thin if it contained 25 per cent water and 75 per cent of sugar. In that case you would not need to mix quite so much of the syrup made on the formula mentioned.—ED.]

Second-hand Kerosene-cans Seldom Used for Honey in Australia

On page 455, July 15, Major Shallard says, "Practically the whole crop of Australian honey is put up in second-hand kerosene-cans." Now, I think Mr. Shallard must be quoting from what was in vogue 12 or 15 years ago, and not at the present time. I also think it is unfair to the Australian beekeepers to have the idea conveyed that we are slishshod enough to put up with the fussing with second-hand kerosene-tins when we can procure good new tins, made purposely for honey, and the little extra expense would be easily offset by the looks of the package and the extra price procured. I feel certain that, if Major Shallard makes inquiries of all the large dealers and commission agents who handle the bulk of the Australian honey, he will find that easily 75 per cent of the honey is put up in tins made expressly for honey. I know of one firm in New South Wales that turns out thousands upon thousands of lever-top honey-tins every year, made exactly like the kerosene-tins in construction, but without the lettering on top denoting that they were intended for kerosene.

Perhaps the major has, on seeing tins of this class on the market when filled with honey, taken them, in error, to be second-hand kerosene-tins by their looks.

I have not time for second-hand tins of any kind myself.

How do you think it would go under the pure-food act if the beekeepers used tins that contain, we will say, Pratt's motor spirits, with the name of contents stamped in the tin, by filling the same with honey and labeling it to that effect? Don't you think it would be misrepresenting the contents?

Stroud, Australia.

WILLIAM BARNES.

A Tribute to R. L. Taylor

I was profoundly grieved to note the death of our old friend R. L. Taylor. He was a rare man—as a statesman, gifted, alert, incorruptible; as a beekeeper, one of the very best; as a citizen and friend, invaluable. It was my wont to visit him and to receive visits from him. I never parted from him without a feeling of sincere admiration, both for the man's ability and his upright character.

I wish to express through GLEANINGS my personal loss, as also my regret that the beekeeping fraternity and the country are henceforth to be without his valuable services.

Sacramento, Cal., Sept. 26.

A. J. COOK.

State Commissioner of Horticulture.

"Coffee A" Sugar No Longer Sold

Referring to page 545, Sept. 1, please tell me what "coffee A" sugar is. Dealers here don't keep anything by that name, but they keep "A" sugar and "C" sugar, both kinds brown. Please let me know soon, as I want to fix up some candy for a few light colonies as soon as possible.

Sterling, Col., Sept. 30.

T. J. LANDRUM.

[Coffee A sugar is the old name for the best white sugar that was known years ago. But since granulated sugar has come upon the market it has supplanted the "coffee A" sugar entirely, so that probably you will not be able to buy it of any of the dealers in your locality. Generally speaking, you would be able to use granulated sugar in any place where "coffee A" is called for. "Coffee A" sugar was granular and white, just like granulated sugar, only it had more moisture in it. The granulated sugar of to-day is perfectly dry, and remains so.—ED.]

Carbon Bisulphide Better than Sulphur

By putting all of the combs from dead colonies into a small close room before they had been exposed to this season's moths, and smothering them thoroughly with sulphur three or four times, the moths have not troubled them except in a few combs. I have looked each comb over separately, after smoking, and have found a number of little dead worms, and from six to a dozen big live worms that the sulphur fumes did not reach. So I have concluded that it will be necessary to look over each comb carefully, and pick out all live worms if I wish to keep the combs from being destroyed. Most of the combs in which I found worms I had taken from hives that were used for bees this summer. I had put them on top to let the bees take out the honey. I believe that if no comb were exposed outside of the tight room after early spring the moths would not bother the combs during the summer; but I would not risk them without an occasional smoking with sulphur.

MRS. L. C. AXTELL.

Roseville, Ill., Sept. 24.

[The writer of the above is one of the older beekeepers of whom there are now so few left, and years ago was a frequent contributor to these columns.

It is probable that the fumes from carbon bisulphide, being somewhat stronger, would do rather more thorough work in fumigating; for, as a usual thing, one application, if the room can be kept very tight, is enough to kill all the larvae of the moth. If there are not too many combs it is better to put them all into a large box which can be covered up air-tight, and put the liquid carbon bisulphide in a shallow dish at the top under the cover.—ED.]

Wintering in a Cellar

For those who winter their bees in the cellar, and who do not like to have the cellar littered up with dead bees, the following may be of interest:

Make a frame four inches deep, the size of an 8 or 10 frame hive. The ends should be solid, and inch strips should join the ends, leaving a space on each side 2 inches wide and 18 inches long, to be covered with wire cloth. This allows plenty of air, and prevents the bees from scattering all over the floor, and still there is plenty of room at the bottom for dead bees without any danger of stopping up the opening. The frame should be set on a flat board without any entrance. This, of course, would call for considerable work where the hives are stacked; but in the spring the hives are placed on the regular bottom-boards, and all dead bees are left in the frame.

Dr. Miller, p. 313 of his book, "Fifty Years Among the Bees," speaks of the odor of dead bees. This is something I have never noticed.

INCREASE FROM TWO TO NINE COLONIES.

The past year has been a very good one in St. Paul and vicinity. White clover yielded plentifully, and the fall flow was very good. All beekeepers report good crops, and increase in some cases doubled. Our own two colonies of last spring increased to nine, with about 325 lbs. of honey from three colonies. We fought successfully American foul brood in three colonies. We will put the bees into the cellar with plenty of stores, and hope for another good year.

ST. PAUL, MINN.

HARRY G. BRANT.

[Several years ago Mr. Orel L. Hershiser, of Kenmore, N. Y., described a cage arrangement similar to the one you mention for use under the hives in the cellar. A number of others have tried it since, but with not very good results.—ED.]

Locating Hives in Pairs

In commenting on Mr. Fred White's article, page 601, Sept. 15, you say, "Old queen-breeders recognize the importance of having each hive so distinct in its location that the virgin will have no difficulty in finding her own home." Will you please discuss this further? I have little room on a back lot.

Oklahoma City, Okla.

R. S. SATTERFIELD.

[The very best plan in locating an apiary is to have the hives located in pairs, and then make sure that the pairs are not too close together. In a small yard this practically does away with any trouble due to virgins mistaking their hives. In a larger yard

the hives can be located in groups of four, two pairs back to back, with just enough room between to walk around. This is really about all that needs to be done by way of precaution, although some beekeepers go so far as to have different-colored hives, or have the fronts of the hives at least painted different colors. It is a question, however, whether this plan is any better than merely locating the hives in pairs as stated.—ED.]

Will Honey Ripen in Unsealed Cells?

The honey-flow has now ceased, and there are many combs containing honey in unsealed cells. Will this honey be ripe if left on the hive a week after the honey-flow, or can it be carried into the honey-house to ripen in the combs artificially?

Northfield, Minn.

ANDERSON BROS.

[There is always some question about the condition of honey that is not sealed. If it can be in the hive a week it is very likely that it will be sufficiently ripened; but an exception to this would be if the colonies were not quite as strong as they should be, or if the weather is cold and damp, at which time we should be afraid that the honey would be too thin. Under such circumstances, if you can not leave it in the hives any longer, take it out and leave the combs in a warm, dry room where a current of air will pass over them constantly. This will tend to evaporate the honey further so that it will be fully ripened.—ED.]

Stings Relieved a Man who Had Suffered for Years

Like C. M. Talbot, Portland, Me., whose letter appears Sept. 15, p. 601, I am a believer in bee-stings for gout and rheumatism. I have attended bee conventions, and invariably have I met those who have been afflicted, and have had a permanent cure by means of bee-stings. Several have come to me for treatment. One man in particular who was strong and healthy-looking, had not worked for three years. He had tried numerous doctors, and had then just come back from the hot springs of Arkansas, but could not get any relief. It was three years ago last June. He came to me for the bee cure. To the best of my recollection he came about every third day for treatment. I applied from twelve to twenty stings each time for three weeks. After that time he was able to follow his old occupation as coachman, and is still on the job, having taken no medicine, and having felt only a light attack of rheumatism since. Before the winter sets in he intends taking a light treatment.

Germantown, Pa.

WM. H. SHINGLE.

Bees Eaten by Chickens

Having kept several colonies of bees in my poultry yard for the past twelve years I have noticed every year that some of my chickens begin to eat dead bees. Later they seem to prefer the drones, and still later in the season they simply stand by the hives and snatch off one bee at a time, slam it on the ground, peck at it once or twice, and then swallow it. Finally, both old and young chickens acquired such an appetite for bees that I had to fence off the chickens. I have seen the bees attack them, but the chickens simply twisted their heads around, looked until they found the bees, and picked them off.

Concord, N. C.

W. D. YORK.

Chickens that Eat Pollen-laden Bees

During my 35 years of beekeeping I have had probably 25 cases where chickens would eat bees at the hive entrance when bees would come in heavily laden with pollen. I think they were after the pollen. I have never known chickens to eat bees willfully.

Milano, Texas, Aug. 23.

G. W. BEARD.

Dead Bees in a Well 30 Feet Deep

Bees are reported to have gone down 70 feet into a well after water. Stray Straws, Oct. 1, p. 612. Undoubtedly bees will go anywhere they can after honey or water; but if they go down 70 feet into a well, they are almost sure to chill and not to return. This fall we cleaned a well only 30 feet deep, and found a large quantity of dead bees.

Boiscaut, Kan.

D. C. ANDERSON.

Our Homes

A. I. ROOT

When the Son of man cometh, shall he find faith on the earth?—LUKE 18:8.

For what glory is it, if, when ye be buffeted for your faults, ye shall take it patiently? but if, when ye do well, and suffer for it, ye take it patiently, this is acceptable with God.—II. PETER 2:20.

Father, forgive them, for they know not what they do.—LUKE 23:34.

Let all bitterness and wrath and anger and clamor and evil speaking be put away from you, with all malice; and be ye kind one to another, forgiving one another, even as God for Christ's sake hath forgiven you.—EPH. 4:31, 32.

Of course I can not tell how many professing Christians and devout followers of the Lord Jesus Christ are feeling sad—yes, very sad—to note the lack of Christian spirit shown by the various candidates for the presidential chair at this very time. If there is any time in the world when the candidate for an important office should set a good example by showing before the world a gentlemanly and Christian spirit, now is the time. Once more, if Christianity and a Christian spirit is ever needed, it is needed just now. On some of our coins we read, "In God we trust;" but are we not *really* trusting in the biggest fighter? If the fighting were altogether for righteousness, say for the destruction of the liquor business, we might demand the best fighter; but even then we need one like Gideon who was fighting under the banner of the great God above. If I am correct, President Taft has never professed to be a member of any church, although we have been told his leaning is toward the Unitarian faith; and I wish to say to his credit that he did, at least at first, show much of a Christian spirit. I rejoiced to hear him come out plainly before the world and say he *does not drink*, and that in his opinion a President of the United States ought *not* to drink. Roosevelt has, in some of his addresses, said some very good things on the side of Christianity; but, oh dear me! what an example he has set before the people of our land, especially the younger ones! I can not think it possible that one who lives a pure and spotless life before God need ever indulge in such invectives as Mr. Roosevelt has been doing continually. I think that Christian people as a rule have all been pained to see the woeful lack of the Christian spirit between the two great candidates for the presidency. Do we really believe the little motto on our coins—"In God we trust"? Right here I recall that Mr. Roosevelt made an attempt to have this legend removed from our coins; but, may the Lord be praised, the protest from the Christian people, or

I might say from a Christian nation, was too great, and the reading still stands.

Woodrow Wilson, up to the present time, has shown a better spirit than either Taft or Roosevelt, so far as I can learn; but my complaint against Mr. Wilson would be for his faults of *omission* rather than for those of *commission*. While everybody knows, and the whole wide world *recognizes*, that strong drink at the present time overshadows every other evil in our land, he is silent, evidently handicapped by the party he represents.

In a recent issue I gave the platform of the Prohibition party. Now, this platform is all that can be desired, for it breathes the spirit of "the Lamb of God that taketh away the sin of the world;" and in response to friend Doolittle and others I have been reading Chafin's addresses, and much of the *Vindicator, Am. Advance*,* and *Clean Politics*, all Prohibition periodicals. Surely, thought I, I shall "find faith on earth," and brotherly love, in these periodicals; but in sadness I am obliged to say that, in this fierce scramble for office, I see that same unchristianlike spirit shown toward other candidates. I have longed—yea, hungered—to see something of the spirit quoted in our texts. Let me illustrate:

Our pastor in his sermon, last evening, related to us a beautiful fable. As nearly as I can recall, it was something like this: One bright morning, just at the break of day, a gravel walk and a little plant called mignonette were supposed to be having a little talk. The mignonette said to the gravel walk, in a cheery way, "Good morning." The gravel walk replied, "Good morning" in return, and then added, "My little friend, what makes you so bright and cheerful and full of fragrance to-day?"

Now listen to the reply:

"My good friend, I am bright and cheerful and full of fragrance because I have been *trodden upon*."

"*Trodden upon?*" replied the gravel walk.
"Why, how should being trodden upon

* By the way, I am pained to see in the *American Advance* of Oct. 5 a hideous cartoon of Taft Wilson, and Roosevelt. Of course, it is along temperance lines; but I feel sure that the earnest, sober Christian people of our land feel as I do that the President, and, for that matter, a vice-president of the United States should never be cartooned. Even if we do not indorse and in all things respect the *man*, shall we not at least respect the sacred office he has been chosen to fill?

"There is so much good in the worst of us, and so much bad in the best of us, that it hardly behoves any of us to talk about the rest of us."

make you happy? I am trodden upon, perhaps, more than any thing else in the world; but the treading only makes me harder and harder."

At this speech the little mignonette nodded in the sunshine, which just then poured over them, and said, "Being trodden upon brings out my fragrance. In this way it makes me happy."

Now, friends, *you* who profess to be live Christians, does being trodden on bring out the fragrance of *your* Christian life? In Luke 6:22 and 23 we read, "Blessed are ye when men shall hate you, and when they shall separate you from their company, and reproach you, and cast you out as evil for the Son of man's sake. Rejoice ye in that day, and leap for joy, for your reward is great in heaven."

Let us now see how this promise fits. When Roosevelt turned against his old friend and comrade in many a political bout, had it the effect of calling out from the President a Christian spirit that was like fragrance before this sin-stained world? I am afraid not; and when people told stories about Roosevelt because he aspired to another term, did he in like manner breathe the fragrance of a Christian spirit and a mind so great that he kept smiling, and kept gentle under severe provocation?

Lest you think I am all the while defending the Anti-saloon League, let us come a little near home. I made a clipping from these Home papers for Sept. 15, and sent it to the editors of both the *Vindicator* and the *American Advance*. They replied courteously, and in a rather better spirit than I expected; but as a matter of course they claimed that the Anti-saloon League was wrong and that they were right. I made extracts from some of their letters and forwarded them to the officers of the Anti-saloon League. Now, wait a minute. The most of the officers and speakers, and especially those who occupy important positions in the Anti-saloon League, are ordained ministers, many of them having for a term of years preached the gospel. Did I find the Christian spirit in their replies that I have long been hungering for? May be I am demanding too much. I will tell you what I wanted to see and what I wanted to hear, and that was something like this: "Father, forgive them, for they know not what they do."

As I have said before on these pages, if the Anti-saloon League and the Prohibition party, the Endeavor Society, the Y. M. C. A., and the Christian people, would unite, the liquor-traffic and the saloon busi-

ness would go down like a rocket after it has exploded in the air. For years past I have begged and pleaded for brotherly love between the temperance forces. I can forgive people for not thinking alike. There is not a single church in our land where all the members agree, and think alike in *every* thing; but they hold together and hang together because of that charity that "thinketh no evil and is not easily provoked."

Do not, dear friends, think for a moment that I am posing as a model Christian. God knows I am far from it. There is only one model and one perfect sample of a man—the Lamb of God who taketh away the sin of the world. Shall we ever have a President who fears God, and who does not fear the rum traffic or any other form of sin and iniquity? Yea, verily; we have God's promise. But this depends very largely on the spirit that you and I show when we are trampled on or unjustly accused, like the little mignonette. It *should* only make us more gentle, and bring out that fragrance which is, before the world, of more effect than any thing else the world has yet known.

THE ANNUAL YELLOW (*INDICA*) SWEET CLOVER.

Mr. Root:—The annual yellow (or *Indica*) variety of sweet clover has been advertised somewhat as a honey-plant and as a soil-improver. In the hope of saving others disappointment I will say that it has proven a complete failure with us. The seed germinated fairly well, but the plants made so little growth that a person not actually looking for it would scarcely have noticed its presence. The ground upon which we tried it had been heavily limed, and contained soils of several sorts. A portion of the seed was also mixed with soil from a patch of sweet white clover containing nodule bacteria.

As both the white sweet and common red clover averaged a fair growth in the same field, I am led to conclude that the yellow annual is entirely unsuited to this climate. This conclusion I find is confirmed by the recent United States bulletin on sweet clover, it being therein stated that it makes very little growth in sections where the other sorts are usually grown. The Bohkara Seed Co., sweet-clover specialists, speak of it as the "worthless annual," and state that the seed is obtained as a by-product in the cleaning of wheat in some parts of the West.

The lower price at which the seed of this variety is sold has been an inducement to its planting; and since a farmer who has failed with one kind is likely to be suspicious of all, it would seem to the interest of beekeepers to help make its inferiority known.

H. D. TENNENT.
McConnellsburg, Ohio., Aug. 27.

The above indicates that the annual yellow sweet clover is not a success in that locality. Now, in drawing conclusions let us remember there are two varieties of yellow sweet clover; and while the annual mentioned above is not a success in his region, it may be successful in other places. We shall be glad to hear from the friends in regard to it.

Temperance

"THE TRUTH SHALL MAKE YOU FREE."

So far as possible I earnestly request that every reader of these Home papers will at once secure a copy of the *Christian Endeavor World* for Oct. 10, and read the article entitled "Religion of Eugene W. Chafin." After you have read that, read the following which I have clipped from his address at Kansas City, August 9, 1911. Our older readers whose recollection reaches back to 1850 will vividly recall all the facts given; and I hope and pray that it may prove to be such a "revelation" to many, as it has been to myself.

ONE STANDARD OF MORALS.

Mr. Chairman, Ladies, and Gentlemen:—

Away back in the forties there was a class of people in this country called Abolitionists. The old abolitionist was the man who said slavery was wrong, and, being wrong, he said it was wrong in every township under the American flag. He was the man who was absolutely right on that question. On the other hand, there was the slaveholder who said it was right, and, therefore, right everywhere. Then we had the irrepressible conflict between right and wrong, and we have that in every moral battle.

WHEN THE IRREPRESSIBLE CONFLICT WAS FIRST DODGED BY CONGRESS.

In 1850 this slavery question became acute in American politics over the admission of California to the Union. When California asked for admission the slaveholders said they would not admit it unless it was admitted as a slave State. The Abolitionist came along then and said it should not be admitted unless it was admitted as a free State. This put the whole question up to Congress. They then had to decide whether they would admit it as a slave State or a free State.

Now, if there is any thing a congressman hates next to being defeated for re-election it is to have to vote upon a question upon which the people are greatly divided at home.

There was one man in that Congress who was in a worse fix than all the rest. He was in a terrible fix, and that was General Lewis Cass, United States Senator from Michigan. He had been the Democratic candidate for President in 1848, and had been beaten by General Taylor, and he wanted to try it again in 1852.

"Now," said General Cass to himself, "if I vote with the North on this question I lose the Southern vote and get licked;

and if I vote with the South I lose the Northern vote and get licked."

So it was up to him to get licked, no matter which side he voted on. What is a poor statesman going to do in a condition of that kind?

THE ORIGIN OF "POPULAR SOVEREIGNTY."

But Cass was a resourceful statesman. He had served his country more than forty years in public office, and in January, 1850, he got up in the United States Senate and made a great speech, laying down the doctrine known in American politics as "Popular Sovereignty."

He said, "Now, senators, this slavery question is a moral question and has no business in Congress." And they have succeeded fairly well in *keeping* morals out of Congress ever since. "Now," he said, "Senators, the way to settle this slavery question is this: Just submit it to a vote of the people over in California; and if they want slavery let them have it, and if they don't, they need not."

("Popular Sovereignty," "local self-government," "Jeffersonian Democracy," "let the people rule!")

DOUGLAS ADOPTS "POPULAR SOVEREIGNTY" NOTION.

California got in under the compromise measure of 1850, and that doctrine was put aside until 1854. Then Senator Stephen A. Douglas, of Illinois, introduced into the Senate a bill which was known in history as the Kansas-Nebraska Act, creating the two territories of Kansas and Nebraska. And you will remember that that great expanse of country out here at that time extended clear to the British line. The slaveholder came over and said, "Senator Douglas, you can't pass that bill unless you provide for slavery in Kansas and Nebraska." The next day the Abolitionist came along and said, "You can't pass that bill unless you have free soil in Kansas and Nebraska."

The whole question was up to Congress again, and Douglas in the same fix that Cass was. He wanted to be President too. "Now," he said, "I will just take this doctrine of Lewis Cass and I will put it into the Kansas-Nebraska Act." ("Local self-government," "popular sovereignty!") And so he did, and passed the bill. That repealed the Missouri compromise, and turned these two territories of Kansas and Nebraska over to local option. And that is all it was.

Popular sovereignty submitted it to a vote of the people to let them settle the

question. That went all right until 1858, when Senator Douglas became a candidate for re-election to the United States Senate for the third term from Illinois, and that summer he got into seven great joint debates in Illinois with a gentleman by the name of Abraham Lincoln; and Douglas laid down his doctrine of popular sovereignty in those debates, and said: "Now, the way to settle the slavery question is to take it out of politics and submit it to the vote of the people. If the people of Kansas want slaves, let them have them; and if they don't, they need not. I don't care whether they vote slavery up or vote it down. Let the people rule."

HOW LINCOLN PUNCTURED "POPULAR SOVEREIGNTY."

That sounds very nice, doesn't it? and it went all right until he turned to Lincoln and said: "What have you got to say to that doctrine of popular sovereignty?"

Well, Lincoln got up, six feet and three inches tall *physically*, but high as heaven *morally*, and said: "Senator Douglas, slavery is either right or wrong, and I hold that slavery is wrong; and, Senator Douglas, if slavery is wrong, I deny the right of Congress, and I deny the right of the legislature of Kansas, and I deny the right of any majority of the voters of Kansas, by popular sovereignty or otherwise, to put a slave where there never was a slave."

What! Denying the right of the majority to decide what is right or wrong?

"Yes," declared Lincoln. "If it is morally *wrong*, no majority can make it *right*."

And then he went on in those famous words: "This nation can not live half slave and half free."

What did he mean by that? That you could not settle that great moral question with two standards of morals.

His illustration was to the point: "You can not settle this question while you have this condition of things: A penitentiary offense to sell a black man *north* of the Ohio River, but as legal as selling Bibles if you sell him *south* of the Ohio River"—wrong on one side of the river, right on the other; wrong on one side of the State line, right on the other—*two* standards of morals.

FROM LINCOLN—TO LORIMER.

After the second debate, Lincoln's political friends got around him and exclaimed, "Now, Mr. Lincoln, you have got to take that position back. A majority of the voters of Illinois and of this nation believe that the majority should rule, right or wrong, morals or no morals." And Mr. Lincoln replied: "I will not take it back.

I am right, and Douglas is wrong." "Then Douglas will beat you for the senatorship." "Perhaps so," retorted Lincoln; "but I will not take it back, even if he does."

Ladies and gentlemen, can you imagine such a thing happening as a man laying aside the senatorship for the sake of being right in the State of Illinois—now? Friends, it is a long way, isn't it? from Lincoln clear down to Lorimer!

EXIT "SQUATTER SOVEREIGNTY."

"Ah, but," Lincoln says, "if he gets the senatorship on that issue, in two years from now the fallacy of popular sovereignty will get into the heads of the American people, and he will never be President of the United States." And, if I remember history correctly, Stephen A. Douglas never *was* President; and in two years that doctrine got into the heads of the people, and then what happened?

The Republican party took that doctrine of Lincoln's and made a platform out of it. The Republican party was born upon the proposition of one standard of morals for the entire nation on that question.

And I want you to remember another thing, to keep in mind that, during that whole controversy, Lincoln and his people always dealt with slavery from the stand-point of its being wrong. Two sentences from Lincoln's inaugural address confirm this fact: "One section of our country believes that slavery is right and ought to be extended, while the other believes it is *wrong* and ought *not* to be extended. That is the only substantial dispute."

WHAT SETTLED THE SLAVERY QUESTION.

The whole controversy was over the question of whether slavery was right or wrong. After the Republicans had builded the platform upon that doctrine, then they took the man who had made the issue and put him on that platform, and, thank God, Abraham Lincoln became President of the United States on that platform and on that doctrine, and slavery died.

Did the compromise measure of the constitution *settle* the slavery question when the constitution provided that slavery should go on for twenty years?

No.

Did the Missouri Compromise *settle* the slavery question?

No.

Did the tariff measure of 1833 *settle* it?

No.

Did the Wilmot Proviso *settle* it?

No.

Did the compromise measure of 1850 *settle* it?

No.

Did "Popular Sovereignty" settle it?

No.

Did two political parties that stood for it for fifty years settle it upon the basis that it was right and could be regulated?

No.

When did you settle the slavery question?

When Lincoln came to the front and laid down this great fundamental principle of right and wrong, hitched those principles up to a new political party and went to Washington to take charge of the government. And then, one day before Lincoln died he signed his name to the thirteenth amendment to the constitution, abolishing slavery *for ever* in our whole nation; and then you settled the slavery question for ever, didn't you?

WHAT SETTLED THE POLYGAMY QUESTION.

I said I was going to show you that this doctrine is as fundamental as the constitution, on settling questions on the basis of one standard of morals.

"But," you say, "that was largely done—i. e., the *bossing* of the job was done—by the Republicans."

How about the Democrats?

It was only a little while after, that the Democrats adopted the same doctrine. Senator Edmunds, of Vermont, looked across this country three thousand miles from his home and saw an institution in Utah called polygamy. He had learned at the feet of Abraham Lincoln that you could not settle a great moral question except upon the basis of one standard of morals for the *whole nation*. One day he introduced into the United States Senate a bill which became known in history as the Edmunds Law, which made it a penitentiary offense for a man to have more than one wife at a time.

What did the Democrats do? Walked right straight up and voted for it, just the same as the Republicans. See what an awful jolt Democratic "personal liberty" got when you would let a man have but *one wife at a time*.

After the law was passed, and officers were sent to Utah to enforce it, Brigham Young protested: "Now, this is all wrong to pass this law without our consent. Take it back to Congress and have a referendum put into it and submit it to a vote of the people. Nine-tenths of the people out here are in favor of polygamy, and what we want is a chance to vote on it." ("Local self-government," "popular sovereignty," "let the people rule!") "In fact," he said, "what we want out here is *local option on wives*." Douglas wanted local option on *slavery*, and Brigham Young wanted local option on *wives*!

What did the Republicans and Democrats do?

HOW THE UNITED STATES ABOLISHED POLYGAMY.

Submit it to a vote of the people?

No.

They said "Lincoln taught us the doctrine of one standard of morals for the whole United States. Polygamy is wrong, and it is wrong in every township under the American flag." And they left the law there and said: "You get right up to that law or you will get into the penitentiary."

But Brigham Young cried: "You can't enforce your old law. Nine-tenths of the people out here are in favor of polygamy, and are against your law."

What did you do then?

Let me tell you one thing you didn't do.

You didn't turn the enforcement of the law over to Brigham Young.

You passed an act of congress providing that the President of the United States should appoint all the officers of the courts, and the President appointed Judge Zane, of Springfield, Ill.—sent him out there to be United States Judge. He got a United States District Attorney from Maine, and a United States Marshal from California. He didn't appoint *anybody* to run that court who had ever been contaminated by living with the Mormons.

These officers went out there to do their duty; and one day Judge Zane called his court to order and said: "Mr. District Attorney, are there any cases to be tried?" The District Attorney said: "Yes, your Honor; John Smith, for having twelve wives." The Judge said: "Call a jury." And they got twelve men in the jury box, and the defendant's attorney looked them over and said: "Now, may it please the court, this is not fair. Every man on that jury is a Gentile. There is not a Mormon in the box." So they challenged them and excused them, and got those twelve off the panel, and got twelve more. They looked those over, and they were all Gentiles—not a Mormon on the jury.

You see, it happened this way: The United States Marshal put the names in the box; and when he came to nine Mormons who were opposed to the enforcement of the law, he left them at home with their numerous wives and children, and put the one Gentile on who had only one wife to leave at home. And under that system he sent over *one thousand* of the Saints(?) to the penitentiary.

PROHIBITION IN THE CONSTITUTION STAYS PUT.

Well, they left the law there in Utah, and it is the standard of morals to-day in the

whole United States. And that law was effective until the infamous agreement was made between the Mormons and the Republican and Democratic parties—perhaps not parties, but politicians at Washington—that they *might* violate the law in consideration of political favors from the Mormons to the political parties running this government.

HOW UNCLE SAM DISPOSED OF THE LOTTERY.

I want to give you another instance where the Republicans and Democrats recognized and applied the same doctrine: Louisiana chartered the old Louisiana lottery soon after the war. After they got their charter out and were ready for business they discovered that it was a penitentiary offense to deal in lottery tickets in every State in the Union outside of Louisiana!

"Well, now," they ejaculated. "We intend to skin the whole United States in this game. What are we going to do? Suppose we go and interview Uncle Sam." They went down and saw the postmaster. He is Uncle Sam in every town in the United States. They said to Uncle Sam: "What is your standard of morals in these matters of sending newspapers through the mails that have advertisements of the lottery in them, sending circulars through the mail from our lottery, sending lottery tickets through the mail, permitting the people to get postoffice orders in all the States, and sending the money down to us, in violation of the laws of all the other States? What is your standard of morals on that?"

Uncle Sam told them: "We have got no law on the subject at all. It is just as legal to send all those things through the mail as it is to send Bibles through the mail."

"All right, we will bring over a ton this evening."

"Very well, just put your stamps on them and we will carry them to every post-office in the United States."

What was the result?

We had gambling in every township in America.

What was the trouble?

We had two standards of morals—a penitentiary offense to deal in lottery tickets in every State in the Union except in Louisiana, and in the whole United States.

What did you do?

You went down and saw Uncle Sam again, and said: "Uncle Sam, we are in trouble. Two standards of morals on the lottery question." He said: "All right. We will fix it." One day Congress passed a bill making it a penitentiary offense to put

a lottery ticket in the mail, or to put a newspaper in the mail that had a lottery advertisement in it, and confiscated the money orders if they bought them for the lottery.

And so you stopped that. Then, when they could not use the mails any longer, what do you suppose they did? What could they do under the circumstances?

ABOLISHING INTERSTATE COMMERCE IN LOTTERY TICKETS.

I will tell you: When they couldn't use the mails for that purpose, under the interstate commerce clause of the constitution, they sent their lottery tickets and advertisements by *express*. Did you ever hear of any thing being shipped from wet territory into dry by *express*? (Laughter.) And under the interstate-commerce clause of the constitution. I see you catch on all right.

Then what did you do?

You went down to Washington again and said: "Uncle Sam, we are in trouble again. They are using the interstate-commerce clause of the constitution to ship their lottery tickets by *express* into all this territory where you prohibited the use of the mails." And once more Uncle Sam said: "We will fix them all right."

HOW THE LOTTERY DIED.

So the day came when Republicans and Democrats united and passed a bill making it a penitentiary offense to ship a lottery ticket *across a State by express or freight or afoot or on horseback*; and then you had one standard of morals for the whole United States, and the old Louisiana lottery died, and there is no legalized gambling under the American flag.

Now, ladies and gentlemen, I want to ask you this question:

Haven't I shown to you, by the legislation of fifty years by Republicans and Democrats, congresses and presidents, that all have acted upon the doctrine laid down by Abraham Lincoln, that you could settle a great moral question only when you had one standard of morals for the whole United States of America?

But you say, "That is all right so far as your congress and the president are concerned; but how about the Supreme Court? That is a part of our government." And from the indications of some of the late decisions, it is quite a big part of our government too.

THE SUPREME COURT AND MORAL ISSUES.

When slavery was abolished they went to the Supreme Court on that proposition, and the Supreme Court said they had a right to pass the Thirteenth Amendment;

that they had a right to pass the Edmunds Law making it a penitentiary offense to have more than one wife at a time.

The Mormons went to the Supreme Court with that question. Brigham Young sent his attorney to that great court with his proposition: He said that marrying twenty-one wives out in Utah was a "religious ceremony."

What did the Supreme Court say? Listen to their answer: "It is not a religious ceremony in a Christian country; to wed one wife is a religious ceremony, but to marry two is a crime," and they said the law was all right.

Then when the law was passed prohibiting *all interstate commerce* in lottery tickets, they went to the Supreme Court with that question, and they said: "The Constitution says that Congress shall have power to regulate commerce between the States, and here you prohibit it."

What did the Supreme Court say? A unanimous opinion of the nine judges said that that clause of the constitution gave congress the right to regulate the shipment of cattle or dry goods across a State line, but on a moral question it had a right to prohibit interstate traffic entirely. Oh what a splendid decision!

THE STRANGEST CONTRADICTION IN AMERICAN HISTORY.

Ladies and gentlemen, I think I have shown you to-night that this doctrine of one standard of morals is as fundamental in our government, and has been for fifty years, as the constitution itself.

And you have acted upon it in every single instance but one in American history for the last fifty years—not only these three prominent instances which I have related, but in many others.

You have acted upon it in every single instance but one, and *that* is when you struck the liquor problem. And when you struck the liquor problem you said: "We will adopt a rule on this question different from any other." Isn't it marvelous that you were reasoning right on every single question before the American people until you came to the liquor question, and then you have an entirely different standard of morals?

See A. I. Root's Special Notice, this issue.

A TRIP ON A MOTOR-CYCLE TO THE OLD WORLD; BY ONE OF OUR GRANDCHILDREN.

Several times of late the question has come up as to who shall conduct my department in this journal when sickness or death shall cause me to drop it. The following letter from one of our grandchil-

dren, who has been spending his summer vacation in a tour through Europe, might suggest an answer; he was not quite 21 when this letter was written, and it is plainly evident he had no thought that it would ever find a place in GLEANINGS:

Dear Grandma and Grandpa:—I thought of home quite often on the Fourth of July; and, oh how I wish I could have been with you all for the picnic supper! It is the first one I ever missed on the Fourth.

I will first tell you the things you want to know worst. I am well and feel fine, and have been well ever since leaving home. My machine runs finely, and I haven't had a bit of trouble with it. We have saved money a good many times by good fortune—first on our motor-cycle crates; then on our transportation of them from one place to another; and, lastly, on our hotel bills and meals. In London we stayed at a private family with Mr. Boxwell. We had our meals and all for only \$3.48 for the five days we were there. Here in Paris we do even better. We get our rooms for fifty cents a night, and our meals for about fifty cents a day, besides getting our motor-cycles kept for nothing at our hotel. It costs a little more per day, but the accommodations are very much better, and the rooms cleaner.

This afternoon we went by the aviation field, and saw an aeroplane circling around the field. Later we saw one up in the air about three thousand feet high. Yesterday we saw seven balloons in the air at one time. This is a great place for aeronautics. Next Sunday is the day which the French celebrate as the Fourth of July. Hundreds of dirigible balloons and aeroplanes will be in the air at once.

Yesterday we were invited over to Dr. Watt's to dinner. He is the pastor of the American Church here in Paris.

Paris is the most beautiful city in the world. I am afraid it is the most wicked city in the world too. The French women are awful. I am disgusted with all that I have seen so far. The time will come when Paris will be taught an awful lesson, with a catastrophe far worse than the San Francisco earthquake. The beautiful buildings, the Eifel tower, the Trocadero, the Arch of Triumph, and all the rest, will be destroyed as was Rome of old, and only their ruins will remain. It will be an awful lesson; but unless the French people wake up soon it will be too late.

The ride from London to Paris was beautiful. The green fields, sprinkled with red poppies, the stone walls and ivy-covered castles and chateaus, the green hedges, the thatched-roof peasants' houses, are all far beyond my power to describe. The roads in England are particularly beautiful. They are as smooth as a concrete floor; and the little villages with their tiled-roof houses and peculiar chimneys are exceedingly picturesque.

We don't have a bit of trouble in going from one country to another, because we got international passes in London from the automobile association. It was quite a lot of trouble and expense to get the passes, but they will save us untold time and money in the end. All we have to do now is to show our papers, have them look at our pictures, and see if they tally with us; sign two or three places, and we are off again. In about a couple of weeks we hope to be riding along the Mediterranean Sea. It will be beautiful in Southern France and Northern Italy.

This trip is doing me a world of good. For one thing it is making a man out of me, I hope. I am thrown upon my own responsibility, and even have to look after the two other boys to a certain extent. I keep both their machines in repair for them. Mine hasn't needed any attention yet.

We are coming home through Boston—at least Mr. Griffith and I are. We will stay there a day or two before we come on home.

I am sure you won't worry about me. I take good care of myself, and God takes care of me. When I get home I shall be healthier, stronger, and will have seen more of the world, which is a good thing for anybody. I also hope to be of some service to the business over here if I can.

Paris, July 8. HOWARD ROOT CALVERT.

WINTERING IN FLORIDA, ETC.

As so many are asking what it costs to go down to Florida and back, we have asked the Seaboard Air Line to give us present rates for the fall and coming winter. Below is their reply:

I beg to advise you that the winter tourist fares from Cincinnati are as follows: To Jacksonville, \$33.55; to Tampa, \$45.15; to Bradenton, \$46.65.

Tickets will be on sale October 15 to April 30, good returning until May 31. If rates are desired to additional points we will take pleasure in quoting the same.

C. B. RYAN,

General Passenger Agent Seaboard Air Line Railway.

Portsmouth, Va., Oct. 2.

You will notice in the above that they give rates from Cincinnati to three points in Florida—Jacksonville, Tampa, and Bradenton, the latter being our winter home. If you wish to take a sleeper, the lower berth will be \$6.25, and the upper berth \$5.00 one way. If you leave Cincinnati in the evening you will be out two nights and a day, reaching Jacksonville in the morning. Now, if your train is reasonably on time you will catch the morning train from Jacksonville to Tampa, landing you at Tampa in the evening, thus making 48 hours from Cincinnati to Tampa or Bradenton. The fare from Cleveland, Ohio, to Bradenton, winter tourist, round trip, is \$57.15; but for a "25-day-trip," it is only \$35.50.

Let me repeat briefly what I have said many times for several years: You can rent rooms, furnished or not, good board and lodging, or board yourself, almost as cheaply in Florida as you can here in the North; and some things, especially the stuff grown in the South, is much cheaper than in our northern markets. You can rent places where one can stay for almost nothing up. In fact, quite a few people live in tents all winter in the neighborhood of Bradenton. Others put up some cheap little edifice that may be afterward used for a barn or stable; and so far as getting employment is concerned, any one who is industrious and skillful may be very sure of getting work. Now, I am sorry to reflect on infirm humanity; but there are always in the South more or less invalids who do not seem to recognize that they are unfit for work of many kinds; and some of these poor unfortunate people have an exalted idea of what they are able to do. Let me give you an illustration:

Just now here in the North there is the biggest kind of a demand for help of all sorts. Men, women, and children are wanted everywhere; and a good many times they get almost twice what they actually earn, because people are so rushed, and there is such a scarcity of help. Notwithstanding

this, just yesterday a big able-bodied man was around begging, saying he had applied everywhere, and could not get any thing to do. Now, may be I am a little severe, but it seems to me it is absolutely stealing to pretend you are working and taking a good man's money for work, and then make only a pretense when you are doing almost nothing. The point is, anybody who has all the time plenty to do, and more too, here in the North, will find exactly the same condition in Florida. A dozen people will be wanting him all at once.

In conclusion, I do not believe I would advise the young and middle-aged who have good places and fair health to go to Florida. But it certainly is a splendid place for elderly people and others who really can not stand the zero temperatures of the North.

Mrs. Root and I expect to start for our southern home on the evening of November 5, after I have cast my vote. We will take a through train that leaves Cleveland at 9 P.M. for Jacksonville, without change.

FLORIDA IN OCTOBER—A LITTLE GLIMPSE OF THINGS.

Perhaps I should explain, before giving the letter that follows, that our town of Bradenton has recently arranged for an electric current during the whole 24 hours, instead of only in the evening, and accordingly I have ordered an electric incubator, of the Cyphers people, so as to be on hand by the first week in November, in order to get it going at once. I wrote my good friend Abbott, who has charge of my "cross-bred" Buttercups, to have a setting of 60 eggs ready for the new incubator. I suppose I can hardly expect a good per cent of fertile eggs or strong fertile eggs just when the biddies are moulting. Here is his reply:

Mr. A. I. Root:—I can save you what eggs you want. The old rooster is all right, and with your hens; but they are moulting, and I am afraid you will not get many chickens. It is taking about 11 hens to get one egg now—that is, the bunch average about 9 per cent. If you are having "cold feet," live in hope. It was 95 at 5 o'clock P. M. to-day in our north room, with both ends and three doors open, and no fire. It is 89 now at 7:30. Doesn't that give you a "glow"? Mr. Rappleye came here from southern Michigan, where he went the middle of July. He said there were only six days during his stay there that he did not wish himself in Bradenton. He has become a "cracker," don't you think?

Bradenton, Fla., Oct. 15. D. W. ABBOTT.

"REGULATING" THE SALOON.

We like the Home, temperance, poultry talks, etc. In answer to the plea, "regulate the saloon," some one hit it about right when he said, "You might as well talk about regulating a powder-mill located in Hades."

Belleville, Kan., Sept. 12.

O. B. HAVEN.